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Norway AW169 deliveries NPAS now have four Show Reports



FEDERAL POLICE: The Brussels based operation has been upgrading its MD520N helicopters with new systems and sensors.

The work has involved several companies from a variety of countries undertaking the integration task. Aeronique Solutions Ltd., UK, CarteNav Solutions, Canada, Hensoldt South Africa, and PAL Aerospace USA. CarteNav has supplied their AIMS mission system software and training. <u>http://www.aeronique.co.uk</u>

JAPAN

NATIONAL POLICE AGENCY: Bell and Subaru Corporation announced at the Paris air show that the Japan National Police Agency (NPA) has placed the first order for a Subaru Bell 412EPX.

The model was announced last year and a scale model was displayed at the Rotorcraft event at Changhi, Singapore earlier this year. The newest upgrade of the Bell 412 series, which was codeveloped by the two companies as the platform for the New Utility Helicopter for the Japan Ministry of Defence delivered the prototype for testing in February 2019.



The 412EPX will benefit from a more robust main rotor gearbox dry run capability, increased internal Maximum Gross Weight to 12,200 lbs. and mast torque output of +11% at speeds below 60 knots. This will provide operators the ability to transport more supplies and achieve better operational efficiency.

Subaru has been providing helicopter maintenance, repair and overhaul support to the Japan Coast Guard, Japan National Police Agency, and to the Japan Firefighting and Disaster Relief Government Agencies for decades.

NORWAY

POLICE: The first two Leonardo AW169 helicopters, LN-ORA [c/n 69089, formerly I-RAIV] and LN-ORB, have been delivered to the police and they have now released the former Merseyside Police EC135T2 LN-OCB back to the UK. The original EC135T2 LN-OCP remained on strength pending the arrival of the third AW169, LN-ORC.

LN-OCB left Oslo with its POLITI logos obliterated by white stick on panels but was otherwise fully role

FRONT COVER: The former Greater Manchester Police Britten-Norman BN-2 Defender 4000 on show at the recent Wycombe Air Park AeroExpo UK and Heli UK Expo - Multi-Mission Expo & Conference. The nose mounted Wescam MX-15 is the original equipment and the airframe awaits refurbishment. The shabby interior was not available for public view and the owners were reticent to even acknowledge its past but, whatever its drawbacks it currently remains more capable than any other UK police fixed wing craft. A report on the AeroExpo event appears in this issue. © PAR



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equipped. It was ferried into the UK via Calais-Dover on May 29 and transited direct to Airbus Helicopters Oxford.

Sources suggest that its future is still to be decided, the redacted support contract between Airbus and NPAS shows it as a 'training aircraft', no longer be part of the NPAS fleet.

The new Norwegian Police helicopters wear a new black grey and white colour scheme rather than the blue and white sported by the EC135s.



KENYA

POLICE AIR WING: The Kenya police service continues under scrutiny over its aircraft fleet. Two more airframes have emerged as being assembled at the National Police Service base at Wilson Airport.

The pair are Agusta Bell AB206 now registered 5Y-RPU and 5Y-TPU. They bring the police fleet to eleven. The Inspector General of Police Hilary Mutyambai says is meant to increase the capacity of the service in line with the ongoing modernisation drive.

Although it seems likely that the airframes were originally operated by an Italian law enforcement unit the *Sunday Standard states that they were* shipped in from the United States.

Of the eleven helicopters now available for the police force, seven are serviceable and two unserviceable. Those that are unserviceable are a pair of Russian Mil Mi-17 that are awaiting spares. 5Y-DCI is in need of structural repairs and the 5Y-EDM, another MI-17 VIP is waiting for the shipment of its engine tail rotor shaft.

Two other Cessna Ce208 Caravan fixed wing planes are also unserviceable and need engine overhauls.

TURKEY

POLICE: With the transfer of operations to the newer Bell 429 little has been heard of the MD600N fleet acquired around 15 years ago until April.

Six of the former police helicopters were registered on the UK registry to Eastern Atlantic Helicopters at Shoreham Sussex. The six were G-CLFP RN069 ex-EM0069, G-CLFR RN066 ex-EM0066, G-CLFS RN065 ex-EM0065, G-CLFT RN061 ex-EM0061, G-CLFV RN060 ex-EM0060 and G-CFLW RN070 ex-EM0070. These were registered in the UK on 26th April and all cancelled again 29th May so it's not clear if any of them arrived in the UK

It would appear that the remaining potentially airworthy airframes have been purchased from the police less those lost during service and perhaps a museum piece. [IT/JP/Aviation News]

UGANDA

POLICE: At an event showcasing their equipment and capabilities the Police Air Wing announced that they have taken delivery of a Piaggio P-180 Avanti EVO 11, taking the fleet to four aircraft.

The display was held at Kaijansi Airfield where the headquarters of the air wing are based. The airfield serves Kajjansi, a town in the Central Region of Uganda, approximately 20 kilometres north-east of Entebbe International Airport, and 16 kilometres south of central Kampala, Uganda's capital and largest city.

The capabilities displayed included fighting wildfires and those on high buildings by helicopter, in in both instances using two tonne capacity Bambi buckets, delivering relief supplies by underslung loads, emergency medical rescue, air assault and pursuits.

The Deputy Inspector General of Police, Maj. Gen. Sabiiti Muzeeyi commended the Air wing for having such capabilities and asked them to even think of other ways to develop the wing. Maj. Gen. Sabiiti urged the Officers of the wing to be disciplined and to handle the assets of the department as if it's their own.

The wing has 13 Pilots operating a mixed rotary wing fleet consisting of Agusta 109 5X-MAH, Sokol 5X-MAG and Bell 5X-MAB helicopters. There is no mention of the three ex-Italian Carabinieri Agusta A109A delivered in 2015.



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The \$5.7M Avanti aircraft was delivered to Entebbe Airport in February by Piaggio Aerospace, it did not enter police service immediately. No role details were given for the aircraft.

UNITED KINGDOM

NPAS: The former Merseyside Police EC135T2 G-XMII, more recently LN-OCB with the police in Norway, returned to the UK at the end of May. It is currently within the Airbus facility at Kidlington, Oxford. In accordance to the redacted version of the NPAS/Airbus Helicopters maintenance contract the airframe is currently classed as a 'training' machine which does not support earlier suggestions that it will be converted in line with the other EC135T2 models. Time will tell.

In accordance to the same document there is confirmation that NPAS St Athan will relocate to NPAS Cardiff. The latest information from NPAS sources state that the relocation of this base will be to Cardiff Airport.

Again, within the contract, it is mentioned that NPAS Doncaster has other MRO's which we know is Gama Aviation for the maintenance of the fixed wing aircraft. The base currently is fixed wing only but it is mentioned in the (rotary wing) contract, thereby suggesting that they may still be considering filling some of its capacity with rotary wing – moving in the NPAS Carr Gate crew and helicopter (G-POLB) from Wakefield is an option. The helicopter does operate training missions from Doncaster. As the P68 is so small TFO type training has to be undertaken in a helicopter temporarily assigned to Doncaster.

This has turned out to be a very underused image I commissioned in early 2017



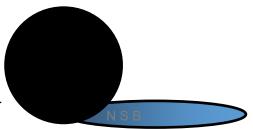
The final two NPAS Vulcanair P68's (OE-FAC / OE-FAI) reportedly arrived at NPAS Doncaster on Thursday 20th June early morning. So far, the Finningley Gallery has not provided photographic proof of arrival. A PAN correspondent happened to catch them visually on radar.

A few days later NPAS issued an image showing all four aircraft in the hangar interior to a 'favoured' Teesside based publication 'Police Hour.' The NPAS script with the image, faithfully reproduced, states categorically that the four aircraft are working to achieve air worthiness and police operational certification and adds that the process will take several months. Check out www.policehour.co.uk

For an unknown reason the latest maintenance contract lists some NPAS bases as priority bases, these are: Barton, Birmingham, Carr Gate, St Athan and London [to be North Weald].

Ed: And whilst on the subject of redaction, the passage of time and the lack of acknowledgement tends to confirm that the Police & Crime Commissioner for West Yorkshire, Mark Burns-Williamson, is not going to release the minutes of the National Strategic Board [NSB] for the past year. So much for open government.

It is clear from pre- March 2018 editions that most of the decisions made in Wakefield Towers appear to be made, or at least agreed, by the bloated line-up in the NSB and not necessarily in line with best advice. Some of the contrary decisions catalogued in the minutes that exist were clearly coming home to roost. Fortunately, the quality of the text redactions was poor and left some unexpected gems open for public comment. That appears to have led to them being removed from public gaze. Probably my fault but I remain sure that public servants are not supposed to show favour to some rather than others.



There are furthering mutterings in the North East.

One of the news organs in Lincolnshire has come out all guns blazing after discovering that NPAS Doncaster cost millions of pounds, was completed in 2017, but has yet to actually operate a single sortie in support of the police.

The article is mainly about the decline in service the North Lincolnshire and Humberside but it also relates to the general decline in service brought about by the removal of a number of helicopters replaced by a single machine at Carr Gates, Wakefield. Clearly one machine cannot replace several is the theme.

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A total of £3.3M was invested in creating the new purpose-built hangar and facilities – the whole understood to be called Hangar Zero. It was hailed as "the flagship airbase" for the National Police Air Service and includes training and conference facility. The base, with three fixed-wing aircraft, has a manager, four police officers, a senior pilot and two relief pilots. *Grimsby Live* has been told extra aircraft have been hired for the purpose of ensuring pilots maintain their required number of hours in flight.



6

Grimsby MP Melanie Onn has raised the decline in air service support in Parliament and is seeking a debate following figures obtained by *Grimsby Live* in a Freedom of Information request. They showed that an NPAS helicopter only responded to 68 requests in Grimsby in a 12-month period. That is compared to 512 flights to North East Lincolnshire between 2014 and 2015, prior to the service's departure from Humberside airport. Flights to other areas in Humberside had halved. [Grimsby Live/Grimsby Telegraph]

Ed: Extracted from a fairly lengthy article that refers to the HMI Matt Parr's report, 'Planes, drones and helicopters' of November 2017. It will however be interesting to see how successful Melanie Onn MP is in highlighting this matter. Previous attempts by other MPs to bring the stagnation in the service given by NPAS to wider notice were simply brushed aside by Home Office spokesmen.

The EC135 based at Wakefield was one of the busiest in the country prior to the creation of NPAS. How anyone could conceive of it serving an area 3-4 times bigger than it already had in NPAS service efficiently escapes all commentators.

Clearly the article was based on incomplete information prior to the arrival of the latest P68 aircraft. Industry sources suggest that the staffing level should have grown further - for a 247/7 operation with just one aircraft you require a minimum of four pilots. It might be assumed that plans are for at least two operational at any one time.

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UNITED STATES

LOUISIANA: As part of the recently concluded financial compensation arrangements between Bell Helicopter and the State of Louisiana over the failure of Bell to honour its commitment to having a helicopter factory in Lafayette the State will keep its new Bell helicopter.

The State of Louisiana gets \$9.5M and can keep a \$4.6M State Police helicopter Bell had handed over as part of the settlement.

The final settlement is nearly \$3M less than the amount Louisiana sought when it filed a lawsuit against the company, claiming Bell never fully delivered on 115 jobs initially promised nor a renegotiated 95 jobs as part of a package of incentives the state provided.

The helicopter maker had occupied a \$26M state-financed manufacturing facility, which closed in August employing 22 workers after the state terminated its agreement with the company.

The state has since negotiated with a different company, Swiss Helicopter manufacturer Kopter, to take over the abandoned taxpayer-owned building at the Lafayette Regional Airport.

Bell Helicopter's deal was initially struck in 2013, with the company agreeing to build a new helicopter assembly hub for its 505 Jet Ranger in Lafayette in exchange for economic incentives for job creation. Bell later said it could not meet its original promises to create 115 jobs after global helicopter demand fell dramatically, and it moved the 505 helicopter assembly to its operation in Mirabel, Canada.

The company then agreed in 2017 in a renegotiated pact to do cabin subassembly work in Lafayette for the Model 525, reducing its job commitment to 95 workers. That deal also included the new helicopter for the Louisiana State Police.

The collapse of the oil and gas helicopter market and with it the prime sales prospects for the 525 saw an end to Bell's intentions to build anything.



AIR AMBULANCE

MANITOBA: The Manitoba government is cutting two Cessna Citation Jets from the province's Life-Flight air ambulance service and will turn it over to a private company. They claim that the move reflects a difficult recruiting regime and a competitive private sector.

Recruiting staff for highly specialized positions is very difficult due to the specific qualifications and training required, as well as significant competition from private sector employers. The Citation jets were underutilised last year, with private carriers used for half the flights.

IRELAND

ICRR: John Kearney, director of Irish Community Rapid Response (ICRR) air ambulance have welcomed the long-delayed announcement by the Dept of Health that a service contract has been signed, meaning that Ireland's first community Air ambulance will be airborne within weeks.

ICRR is a charity and committed to fundraising €2M annually to pay for the helicopter, the pilots, the airbase at Rathcoole in Millstreet and the fuel.

UNITED KINGDOM

NATIONAL: The annual reception held by the All-Party Parliamentary Group for Air Ambulances (APPGAA) took place on the House of Commons Terrace, Westminster on 10 June. The event, hosted by Chairman of the APPGAA Robert Courts MP, gave members of both Houses of Parliament the opportunity to meet with representatives from air ambulance charities and ambulance services.

A total of 152 attendees came together and used the opportunity to highlight and discuss some of the key issues that affect the sector. The five key issues proposed by the Association of Air Ambulances (AAA) are: Helicopter Landing Facilities, Patient Data/ Outcome Information and Risk Management Support, the Emergency Services Mobile Communications Programme, Limits on Society Lotteries and Flight Time Limitations for Helicopter Emergency Medical Services (HEMS) crew members.

The UK fleet of free at the point of need pre-hospital care helicopters now numbers 39. These helicopters are on call, at all hours of the day and have over 50 support vehicles on hand to support the delivery of your world-class care in conditions where flight is not possible.



The UK Air Ambulances model is unique and supported with a light touch by the Government of the day.

It is only 30 years ago that the first air ambulance started in Cornwall. Now there are 21 air ambulance charitable services in the UK. The mission since then has totally transformed thanks to the addition in the last decade of doctors with advanced skills and specialist pre-hospital emergency medicine training joining the teams. The system has morphed from being primarily a flying road ambulance, into a flying accident and emergency department. The first night HEMS mission took place approximately five years ago and some air ambulance services are now delivering critical care 24 hours a day.

The AAA represents the majority of air ambulance charities, a number of ambulance services and the supply chain of support services throughout the UK. The AAA supported the reception for the seventh year, bringing patients, charities, ambulance services and legislators together. https://www.aoaa.org.uk



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Those attending heard TV presenter Alex Beresford speak movingly about the impact of knife crime on society. Alex's cousin Nathaniel Armstrong was tragically killed during a knife attack earlier this year.

The Good Morning Britain weather presenter and anti-knife crime campaigner spoke about the impact of knife crime on his own family and discussed ways of tackling the issue.

Keynote speaker for the day was Assistant Commissioner Graham Ellis, Head of Operational Resilience and Special Operations Group at London Fire Brigade (LFB). Mr Ellis undertook the Gold Commander role for LFB during several terror attacks on London in 2017.

The conference, held at Anglia Ruskin University in Chelmsford, brought together over 300 medical specialists and staff from emergency services to discuss aspects of pre-hospital medicine. The theme for the day was 'Reflect, Learn, Innovate'.

The event was sponsored by Specialist Aviation Services, Leonardo Helicopters, MDS Civil Engineering and Anglia Ruskin University.



Speakers Ben Swift (L) and Alex Beresford (R) with EHAAT CEO Jane Gurney ©EHAAT

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FIRE

VIGILI DEL FUOCO: Leonardo has signed contracts for five additional AW139s to the Italian National Fire Corps (Vigili del Fuoco, part of Ministry of the Interior), including integrated logistic support and

training for crews and technicians. The orders, valued at over \in 75M, add to the previously purchased three units, with two already delivered this year. The five new helicopters are expected to be delivered in June 2020.

The Italian National Fire Corps intends to progressively replace the decades old AB412s helicopters and to guarantee optimal coverage and increased responsiveness across Italy. The introduction of the AW139 marks a major enhancement of airborne multirole capabilities with the world's most modern helicopter for maritime and mountain Search and Rescue (SAR), medical rescue, firefighting and disaster relief duties. The fleet modernization programme includes an option for seven additional helicopters which could be added to the eight already ordered.



Over 816,000 rescues and sorties are performed every year countering fires across Europe, including many in Italy. The Italian National Fire Corps AW139 helicopters feature a wide range of mission equipment, including an external rescue hoist, cargo hook with Bambi bucket provision, weather radar, multi-band and satellite communication systems, high definition Forward Looking Infra-Red / Low Light TV (FLIR/LLTV) system, Leonardo's high definition mission console with digital recorder, high definition down link, Leonardo's Optical Proximity LiDAR System (OPLS), Night Vision Goggle (NGV) capability, new generation Trakka searchlight, emergency floatation system and external life rafts, external loudspeaker, medical rack and bubble windows. The aircraft also feature an advanced 4-axis autopilot suited for SAR operating over the sea.



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SEARCH & RESCUE

SCOTLAND: A coastguard helicopter winchman has been recognised for his actions during the rescue of two fallen climbers on Ben Nevis. Scott Sharman was part of an Inverness Coastguard crew sent to the aid of the men on 16 December last year.

Because of the terrain the climbers had fallen into from Tower Ridge, Mr Sharman had to climb to them without the safety of the winch. One of two climbers rescued from Ben Nevis was Cardiff University student Patrick Boothroyd, from Holmfirth, West Yorkshire. The 21-year-old died following his rescue. His climbing companion, who had fallen to a different spot below the ridge, was injured but survived the ordeal.

Because of the difficult, snow and ice-covered terrain and the risks posed by the helicopter's downdraft, Mr Sharman disconnected himself from the safety of the winch wire and made his way to the casualty. Mr Sharman moved the man to a place where they could both be brought onboard the helicopter.

He has received The Billy Deacon SAR Memorial Trophy – an award named after a Bristow Helicopters winchman who died after rescuing 10 people from a stricken cargo ship off Shetland in 1997.

INDUSTRY

At the end of May, during the CANSEC Defence & Security show, **Viking Air Limited** of Victoria, British Columbia announced plans to hold a world demonstration tour for its Guardian 400 aircraft, the special mission's variant of the Viking Series 400 Twin Otter. The world tour, to commence in September, will include detailed briefings and demonstration flights in Europe, Africa, Middle East, India, South East Asia, Oceania, and North America.

For six months, a production Series 400 Twin Otter underwent modifications to transform it into Viking's Guardian 400 demonstrator aircraft for the proposed world tour. It will feature a left-hand SCAR pod with Hensoldt Argos EO/IR imaging turret, multi-spectral HDTV camera, megapixel HD Thermal imager, laser range finder, multi-mode auto tracker, and Remote Image Bus (RIB) video feed for display on the cockpit MFD or crew workstation. The demonstrator will also feature a right-hand SCAR pod with Leonardo Osprey Radar System and Sentient Vidar camera system.

In addition to its mission sensor package, the Guardian 400 prototype will be equipped with an Airborne Technologies' tactical workstation with high-definition touchscreen monitors, data/voice/video recorder, Mission Management Unit (MMU), mission radio communications, intuitive hand controller for MCU & SLR camera targeting, CarteNav AIMS mission system software, Kestrel MTI targeting software, and IKHANA ergonomic mission seat for optimized crew comfort. The prototype will also be equipped with Viking con-



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formal bubble windows, left and right wing-mounted hard points by IKHANA, Thunder Bay Aviation stretcher racks, and an aft lavatory for crew comfort. The Guardian 400 world tour has briefing, and demonstration flights proposed throughout Europe, North Africa, Central Africa, South-eastern Africa, the Middle East, Southern Asia, Asia Pacific, North America and will culminate in Ottawa, Canada to coincide with the 2020 CANSEC Defence & Security show.

On the eve of the Paris Air Show additional opportunities were taken to publicise the tour with images and words released by Viking and Airborne Technologies, the latter promoting their Airborne LINX mission station. For the World Tour, Viking Air and Airborne Technologies have chosen the "crème de la crème" of the suppliers in the special mission arena.



Carte Nav is revising its marketing set up and withdrawing its existing UK based employees. The Canadian company has only two physical offices, both are in Canada, one in Halifax, and one in St. John's. They did not have an office in the UK but there were three employees who worked from home. A UK legal entity was to pay them. In a change of direction, the company has decided to service the markets from Canada using as yet unidentified partners. To that end it has employed fifteen additional staff although the familiar UK based staff have now been let go.



As the new system evolves, customers can continue to contact CarteNav through the company website or by e-mail at <u>information@cartenav.com</u>

Lockheed Martin's Sikorsky helicopter facility in Coatesville will shut down by the end of this year. Lockheed Martin "has made the difficult decision to close the Coatesville, Pennsylvania, facility by year-end and relocate production to other Sikorsky sites due to the multi-year slump in the rotorcraft industry and the need to balance footprint and workforce with customer and requirements."

The closure of the Chester County plant will affect about 465 employees. As many of these employees as possible will be found places in other Lockheed Martin facilities.

Sikorsky's Coatesville campus, at 110 Stewart-Huston Dr., has three buildings, two of which are leased and a third called the Heliplex, which Lockheed owns and will put up for sale.

Rheinland Air Service (RAS) was exhibiting the ATR72 based MPA Sea Eagle during the Paris Air Show, in Le Bourget, France. This is the second special mission aircraft conversion for the Pakistan Navy made by RAS special mission aircraft division. The first modified ATR72 series was handed over to the Pakistan Navy by the Mönchengladbach-based company Rheinland Air Service (RAS) mid-2018. In cooperation with the Braunschweig-based company Aerodata, RAS converted the former passenger aircraft into a state-of-the-art multiple role maritime patrol aircraft with anti-submarine warfare capabilities. Within one year, the turboprop aircraft was equipped with state-of-the-art mission systems such as Aerodata's Mission Management System "AeroMission", an AESA Surveillance Radar System, two weapon hard points, a Sonobuoy Launching System, a broadband Satcom System and an Electronic Support Measures Systems as well as a high-resolution Electro-optical and Infrared System.

Leonardo and **Diamond Aircraft Industries** are teaming up to offer a version of Diamond's popular twinengine DA62 aircraft customised for maritime surveillance missions. The new variant, designated DA62 MSA (Maritime Surveillance Aircraft) was on show for the first time at Paris Air Show last month. It will be outfitted with a full Intelligence, Surveillance and Reconnaissance (ISR) suite based on Leonardo's ATOS (Airborne Tactical Observation and Surveillance) mission system.

The collaboration is a response to the need for cost-effective, short/medium-range land and maritime surveillance platforms in regions such as South America, Africa and Asia Pacific. The DA62 MSA meets this requirement by bringing together an affordable and pilotfriendly aircraft with a full set of state-of-the-art sensors which, through the ATOS mission system, deliver a single, intuitive operational picture to the crew.

The DA62 MSA's baseline sensor fit will include a Leonardo Gabbiano Ultra-Light TS Radar, which comes with an extensive suite of modes including optimised maritime patrol capabilities (such as high sea state detection), high resolution ground mapping via synthetic



aperture radar (SAR) modes, ground moving target indication (GMTI) and weather avoidance modes. The aircraft will also come with a High Definition electro-optic (EO/ IR) turret which, like the radar, will be fully integrated into the operator's touch-screen ATOS display in order to follow and manage the surveillance missions. Sensor options will also be offered for users who require additional capability, including Leonar-do's SAGE electronic support measures (ESM) system and Spider communications intelligence (COMINT) system. SAGE provides tactical threat awareness and strategic intelligence gathering in the radiofrequency (RF) environment, while Spider can detect, intercept, identify and geo-locate communications of interest.

More than 110 Twin Engine Special Mission aircraft have been sold by Diamond and more than 60 ATOS systems are installed by Leonardo on 10 different platforms, including for Italy's Air Force, Guardia di Finanza (customs police) and Coast Guard and Australian Customs.

Universal Avionics (UA), an Elbit Systems Company, was showcasing its unique Interactive-Synthetic Vision System (i-SVS) during the 2019 Paris Air Show. The innovative operator's sight-control concept allows pilots to easily select entities on the company's conformal SkyLens Head-Wearable Display (HWD), sending it directly to the InSight Display System.

SkyLens and InSight are both critical components for safety in today's aircraft and reliance on them by the operator varies during the phases of flight. Integrating the two technologies enables the pilot to have the key information required, right when it's needed, all presented super-positioned on the real world. Pilots

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can control the InSight Display System by a 'look and select' menu system displayed via the SkyLens HWD with an unlimited Field of View. Site-selection reduces operational tasks, allowing the pilot to program and update flight path, runway selection, and other commands during critical approach phases, without distracting attention from flying the aircraft head-up. The fully integrated i-SVS function allows change of runway selected, approach selected, and waypoint programming, all by looking on a virtually presented flight path and point selection with sight.

As part of the NextGen roadmap, the InSight/SkyLens integration aligns with Federal Aviation Regulation (FAR) 91.176 released by the U.S. Federal Aviation Administration (FAA), enabling the operator to perform a full landing procedure with no natural vision, where the reported visibility is as low as 1000 feet. The integrated system offers unmatched capabilities, providing dispatch and landing approach priority as well as Low Visibility Landing regardless of the destination airport's infrastructure. Once on the ground, SkyLens can assist and guide the aircraft to the gate in poor conditions.

DAC International Inc (DAC), a subsidiary of Aero Precision Holdings LP, has received Supplemental Type Certificate (STC) for installing an ADS-B Out system utilizing the Becker Avionics BXT6553 transponders into eligible Part 25 aircraft.

The Becker BXT family's latest version Mode S transponder, the 6553, is designed specifically for full interoperability with existing TCAS II systems, as well as ADS-B compliance. The BXT Mode S transponder provides a much-needed alternative to traditional Mode S suppliers in business, commercial TCAS II operations, as well as any place TCAS II systems are in use such as business jets and air transport operations, both civil and military. <u>www.dacint.com.</u>

It has been around somewhat unloved what seems a lifetime, yet again the Russian Helicopters Holding Company presented the light multi-purpose Ansat helicopter at the 2019 Paris Air Show. Slowly it seems to be getting to work in a crowded market.

This time the type was equipped with the new Mku30 satellite communication system and an EMS interior system.

The Mku30 satellite communication system allows single-point and multi-point video conferencing on board, smooth real-time transmission of selected amounts of data and high-video content.

Russian Helicopters were showing two variants of the Ansat helicopter – medical and VIP versions. Russian Helicopters Holding Company and an Austrian company Air Ambulance Technology signed a cooperation agreement. The parties agreed on joint development and Russian certification of the medical module which may be installed on Ansat helicopters.

Creation of the new medical module which meets international standards for medical aviation will allow the holding company to expand the pool of potential customers, including European companies. We expect that installation of such equipment will help Ansat get a certificate of the European Union Aviation Safety Agency Technologies.

Wescam reported record-high orders of more than \$120M in contracts for its MX[™]-Series electro-optical/ infrared (EO/IR) sensors, mission system solutions and in service support in the first quarter. This order milestone complements its 2018 landmark year-end, where the company received over \$500M in orders – making it the largest year in WESCAM's history.







Longview Aviation Capital ("Longview") and its subsidiary **Viking Air Limited**, a global leader of utility aircraft, support and services and manufacturer of the world-renowned Twin Otter, announced a seven aircraft sales contract for six new-production CL-515 aircraft and one CL-415EAF.

The CL-515 is a newly developed, technically advanced multi-mission aerial firefighting aircraft – the next generation of the Canadair CL-415, the aviation industry's benchmark amphibious aircraft and the backbone of firefighting missions around the globe. With enhanced firefighting capabilities, and the flexibility to support a wide range of critical mission operations, the CL-515 will be a vitally important strategic asset to fleets around the world.

The Republic of Indonesia's Ministry of Defence has agreed to purchase six all-new CL-515 aircraft, four of which will be delivered in "First Responder" multi-mission configuration, and two delivered in optimized aerial firefighter configuration. The purchase agreement also includes one CL-415EAF "Enhanced Aerial Firefighter" aircraft converted from a CANADAIR CL-215 to EAF standard by Longview Aviation Capital's subsidiary, Longview Aviation Services.

It is expected that the first new CL-515 will be delivered on schedule in 2024.

Safran Helicopter Engines has made the first ground run of its Tech TP, a turboprop technological demonstrator based on an Ardiden 3 turboshaft and developed as part of the EU Horizon 2020 research and innovation programme. The test took place at Safran Helicopter Engines' facility in Tarnos (France), on 12 June 2019. More than 20 European partners are contributing to this technological demonstrator.

Shenzhen Eastern General Aviation Company (Shenzhen Eastern GAC) has signed an agreement for one ACH160, becoming the launch customer for the VIP version of this medium helicopter in China. The aircraft will be used to perform mainly private and business aviation (PBA) missions around the Guangdong-Hong Kong-Macau Greater Bay Area of China, which is home to approximately 70 million people and contributes to 12% of China's GDP.

On 10 June 2019, Reed Business Information Ltd. announced its intention to sell its aviation publishing activities, to DVV Media International Ltd. ("DVV"). The sale includes publications **Flight International**, Airline Business and other publishing activities at international air shows including Flight Daily News and Flight Evening News, a portfolio of aviation conferences and awards, including The Airline Strategy Awards, and other publishing activities such as Flight Jobs.

RBI's aviation Data & Analytics business (including the Cirium Dashboard and Fleet and Values Analyzer products), trading as Cirium, will not be affected by the sale.

July 2019

ACCIDENTS & INCIDENTS

26 March 2019 Airbus Helicopters AS365N2 N611LL. Air ambulance of Hershey, Pennsylvania, After arriving from a 100 mile inter-facility flight a walk around at the hospital pad revealed no faults The pilot undertook a 5 minute flight to refuel at a nearby airport alone. Upon shutdown at the airport the pilot noted excessive oil on the left side of aircraft trailing aft from the engine area, covering the tail and dripping from the engine compartment drain port. The mechanic found that the #1 engine oil filter housing seal had failed and allowed approximately 1 quart of engine oil to be discharged from the base of the oil filter housing. A large puddle of oil was found in the area of where the aircraft had been, indicating the seal failed instantaneously on start up for re-positioning to the airport for fuel. [Concem]

25 April 2019 Airbus Helicopters EC135 N??? Air Ambulance of Airlift Northwest. Returning to base after dropping a patient off at an urban trauma center, the team reported a loud audible impact. The pilot noted no warning indicators or trouble controlling the aircraft. The team made a precautionary landing at a nearby airfield. Bird strike found. Damage to a panel, an apparent bird strike, which would require cosmetic repair. The crew returned to base without incident. [Concern]

5 June 2019 Leonardo AW109 N109FB. Phoenix Police Air Unit. A hoist rescue in which the female patient strapped into a Stokes basket entered an uncontrollable spin due to the rotor downwash. No injuries

22 June 2019 Lockheed L-188 Electra C-GZCF "490" Fire fighting aircraft operated by Air Spray based at Red Deer Airport, Springbrook, Alberta Canada. Landing gear failed to extend. Aircraft landed gear up on its belly tank with little damage overall at Red Deer Airport.

26 June 2019 MD500E South Carolina Law Enforcement Division (SLED) on a mission conducting sweeps of marijuana fields crashed at Summerville Airport hen attending to refuel. The pilot was the only one in the helicopter and was taken to the hospital for non-life threatening injuries. The helicopter had broken apart at the rear of the pod and was sitting back on the skid heels. [Media]



28 June 2019 AgustaWestland A109 Grand N11NM. Air ambulance of North Memorial Health. En-route for Crow Wing County Airport Wisconsin in thick fog the helicopter impacted fenced field terrain while on a night approach to Brainerd Lakes Regional Airport (BRD), near Brainerd, Minnesota.

The helicopter sustained substantial damage. The pilot and nurse were fatally injured. A third occupant survived with serious injures. The pilot and female nurse, Deb Schott aged 58, died at the scene. The crew member was taken to St. Joseph's Medical Center in Brainerd, according to a statement released by North Memorial. The condition of the crew member has not been disclosed. Damage reported as "substantial" by the FAA. [Media]



UNMANNED

On 11 June 2019 common European rules on drones were published. <u>Commission Delegated Regulation</u> (EU) 2019/945 & <u>Commission Implementing Regulation (EU) 2019/947</u> are designed to ensure drone operations across Europe are safe and secure. The rules will amongst others help to protect the safety and the privacy of EU citizens while enabling the free circulation of drones and a level playing field within the European Union.

The common rules will help drone operators, whether professional or recreational, to have a clear understanding of what is allowed or not. At the same time, it enables them to operate across borders. Once drone operators have received an authorisation in the state of registration, they are allowed to freely circulate in the European Union. This means that they can operate their drones seamlessly when travelling across the EU or when developing a business involving drones around Europe.

The new rules include technical as well as operational requirements for drones. On one hand they define the capabilities a drone must have to be flown safely. For instance, new drones will have to be individually identifiable, allowing the authorities to trace a particular drone if necessary. This will help to better prevent events similar to the ones which happened in 2018 at Gatwick and Heathrow airports. On the other hand, the rules cover each operation type, from those not requiring prior authorisation, to those involving certified aircraft and operators, as well as minimum remote pilot training requirements. The new rules will replace existing national rules in EU Member States.

While the EU regulation will enter into force in the next 20 days, it will be applicable only in one year, to give Member States and operators time to prepare and implement it. As of June 2020, operators of drones will need to register in the Member State where they have their residence or their main place of business.

There are times when it seems that the burgeoning police drone operations are making all the mistakes that were made by 'real' police air support. The prime among these is making claims and promises, aims and aspirations, that will probably ultimately fail to be achievable let alone affordable. This overt display of over ambition is not confined to any specific nation or operator.

At the core of the wayward financial assumptions are the standard trick of not counting the burgeoning costs of staff. The assumption that the staff and other facilities are "already there" so free from costing has been the crutch of many a project. As NPAS recently found, when the blindfolds are lifted, and the true costs taken into consideration the reality is horrific.

The police drone operators in Essex have delivered specialist training to help other forces with operations at crime scenes, collisions, incidents and at large events.

Essex Police claim to be the national lead for drone training with a massive staff of 59 officers and staff qualified as drone pilots. Essex Police is a territorial police force responsible for policing the county of Essex, in the east of England, consisting of over 1.7 million people and around 1,400square miles. It is one of the largest non-metropolitan police forces in the United Kingdom, with over 2,900 police officers. Essex Police regularly tell their tax paying public that they are under-manned and over stretched and yet this challenged force of less than 3,000 men and women have found time to train its own people and to set aside officers to provide training to 174 policing colleagues from other police forces.

The training is not simply learning to fly the craft legally and safely, it includes training in how to create 2D maps and 3D models generating calculations and measurements for many reasons – be it preparation for operations for a large festival or providing evidence following a fatal collision.

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Perran Bonner, Essex Police's drone manager, said: "Drones provide many great opportunities and we are training more people than ever to use them. This could be to help gather evidence and forensics, to help plan in detail ahead of a large event or demonstration and to assist in the search of missing "We have worked closely with partners such as RNLI, Urban Search and Rescue, HM Coastguard and UK Border Force to help give extra training or operational assistance within for search and rescue operations."

July 2019

THINK BIG

Ominously, Bonner believes that police should create a national "eye in the sky" drone squad to help tackle major incidents such as terror attacks. He claims that unmanned craft can often provide better value than helicopters.



He cites instances where Essex have found the unmanned craft had already helped save lives, found missing people or bodies, protected officers and the public from harm and mapped road accident scenes to enable traffic to be cleared more quickly. In general, the claims are simply a repeat of all the claims made by conventional police air support – spotting criminals hiding on roof tops and money saving aerial searches for people that sit with the Home Office O'Donnell Theory. A claim that a car crash victim was saved from hypothermia after a thermal imaging drone found him in freezing temperatures sounds very like the case in Canada rather than the relative warmth of Essex.

Ed: I live there and it really is not that cold very often. Something borrowed for effect perhaps.

PERFORMANCE MISMATCH

He contrasts a helicopter sitting in the sky for hours on end burning jet fuel, with a battery powered drone but neglects to point out that due to its 20-minute endurance a single cheap to acquire drone cannot provide constant aerial presence. Add more drones with greater capabilities to the mix, add more pilots, and the costs of the logistics multiply.

As has been found with conventional helicopters, the real costs lie in the staffing. Supporting a local group of 59 officers is one thing, add initial and ongoing currency training, and absence from normal service capabilities and the real costs climb. That aspiration for the creation of a National Police Drone Service brings on masses of additional costs. All you need for a guide is the number of high costs brought into the creation of an independent NPAS.

At one time NPAS had plans to take over drones but that collapsed in the latter part of 2017.

Perran has substantial aviation credentials in that he has held a variety of commercial and operational roles within the communications, aviation and airborne surveillance sectors over the last 21 years. He is presently the accountable manager for Essex Police where he leads the development of unmanned aerial operations as a Tactical Adviser and instructor.

He has extensive experience of working with military and government clients globally and has established two successful companies operating unmanned aerial systems that were later sold after extensive business development.

Perran has logged hundreds of hours of manned flight time worldwide. Working with UAVs has enabled him to combine his interests and skills to further operational value. Since gaining his UAV qualifications he has flown a wide variety of missions for clients across many industries. His experience includes heavier weight categories and beyond visual line of sight flight operations – currently areas beyond day-to-day police operations.





12-13 November ExCel, London

For others the vertical lift dream continues. **Skyports** and **Volocopter** have announced a cooperation to build the first mobile Volo-Port for air taxis. UK-based global vertiport owner and operator Skyports and air taxi pioneer Volocopter unveiled plans for the Volo-Port – the physical landing pads for so-called eVTOL (electric take-off and landing) – through stunning designs produced by internationally renowned agency Brandlab.

Organisers of The Emergency Services Show have announced two new features at this year's event: the SkyBound Rescuer Drone Seminar and a SkyBound Rescuer Drone Zone, sponsored by SOARI-ZON® by Thales. The new seminar and exhibition zone are designed to foster drone development for emergency services through research and discussion. The Emergency Services Show 2019 is the UK's largest event for the emergency services and a showcase for emerging technologies. It takes place in the Drone Dome, Hall 5 at the NEC, Birmingham on Wednesday 18 and Thursday 19 September. The SkyBound Rescuer Drone Seminar and a SkyBound Rescuer Drone Zone will help emergency services and public safety professionals to make the best tactical and strategic use of drone technology. Attendees are expected to come from every part of the emergency services community including police, fire and ambulance; lowland, mountain, cave and coastal SAR; lifeboats and flood rescue units. The SkyBound Rescuer Drone Seminar Day on 19th September will share the latest innovative thinking reveal what lessons can be learned from experience, fully explore what is possible today and equip visitors with the strategic and tactical knowledge to apply to future drone operations. The seminar day opens with a thought-provoking presentation on Public Safety Drones by internationally renowned keynote speaker, Charles Werner; a pioneer of drones in public safety across the USA. This will be followed by five research-driven presentations covering the latest research in the field of drones for public safety in the UK and internationally. These will cover:

- Drone Procedures Optimisation
- Optimising the Probability of Detection for an Aerial Search by Using ViDAR
- Using AI and Drones to Detect Aggressive Behaviour and Weapons in Crowds
- Using Autonomous BVLOS* Drones for First Response
- Drone Search Research Trials

All aspects of The Emergency Services Show, including the exhibition and seminars are free-to-attend, as is parking at the venue. To register for free entry to the event and to find out more visit www.emergencyuk.com

PEOPLE

At Specialist Aviation Services [SAS, PAS & MAS], Staverton, Gloucester Airport, **Henk Shaeken** has left the position of Chief Executive Officer. There have been other changes.

The new Chief Executive Officer is **Luke Farajallah**. Luke joins SAS from the airline Flybe where he was Group COO & Accountable Manager.

Prior to joining Flybe Luke held executive positions in several high-profile aviation companies including British Airways, easyJet, Wizzair, and in the Rotary sector Luke was the Managing Director of Bond Offshore Helicopters.

Another new arrival at SAS will be **Natalie Bush**. She is to be the COO at SAS having followed Luke Farajallah from Flybe where, for the last 2 years and 5 months she has been the Director of Safety and Security and airline Captain mainly operating out of Exeter Airport. After 14 years with Flybe she moves into Staverton on July 1. She sees her role at Staverton as mainly supporting HEMS services across the UK.



Steven Watson, recently with the now closed UK based CarteNav operation now has a post as Business Development Manager and Sales Manager with 3SDL Ltd.

Although the new Accountable Manager is in place in practical terms **Ollie Dismore** still holds the reins as the new Chief Superintendent goes through the multi-faceted induction phase. The interim position is expected to continue throughout most of this month.

LETTERS

I have just read the latest copy of PAN - well done!

I was a founder member and latterly CP of a certain now disbanded police helicopter support unit. I felt obliged to move on from the job some years ago when the company I worked for was undercut by a cheaper contract bid from another provider, who wanted to reduce our terms and conditions. Although I'm now too old for single pilot public transport I still fly for a living. I hold a fixed wing CPL as well as an ATPLH and I've been following the progress, or rather the lack of effective progress of the NPAS fixed wing operation at Robin Hood airport. I live not too far from the airport and regularly fly over it and sometimes to and from it. I watched with great interest as the NPAS hangar was being built. This appears to have been finished for what must be over two years now. The fixed wing aircraft based therein seldom fly - I do recall one being flown by night in the local area for what were presumably crew training or currency purposes, but that was last winter.

My industry contacts tell me that as far as they know, these aircraft proved to be incapable of operational flying, for a whole raft of reasons, some of which were well understood by some of us in the aviation industry a long time before those running NPAS seemed to do! For example, choosing to buy a piston engine, aircraft of known limited performance? The design is almost archaic. A "modern" aircraft running on AVGAS is severely restricted in the number of places it can obtain fuel, especially at night! I was aware that this type had no icing clearance - how on earth did the manufacturer get away with advertising it as "all weather"? Why did those responsible at NPAS not realise they were being duped?

I understand that there have since been major problems with installing the necessary police equipment because of a lack of suitable wiring capacity. Subsequent basic weight increases apparently now dictates that only one observer is to be carried instead of the proposed two and that the advertised endurance has been drastically reduced.... what a shambles!

I understand that the entire crew(s) and a number of contracted maintenance engineers have been and are being paid for nil effective operational return. The whole project has so far obviously been a money pit for taxpayers' money, and it appears that it might never produce the operational effectiveness that it was supposed to.

I think it is time that NPAS were held to account.

Best regards,

Name withheld by request

Ed: This letter clearly predated the latest information that there are now four £5M aircraft sitting in a £3.5M hangar.

This letter was also sent to the Daily Telegraph in late May 2019

'Eye in the sky'

Whilst, I understand the view of Perran Bonner of the Essex Police drone unit, with regard to drones v manned aircraft (Daily Telegraph, 29 May 2019), I suspect that he has limited understanding of the broader aspects 'Air Power'. In particular the principles of, speed, height and reach. In May 2017 the UK Civil Air Patrol, in conjunction with the Centre for Search Research, Newcastle University and the Northumberland National Park Mountain Rescue Team, conducted a comparative trial which compared drones, typically the DJI Inspire, which is used by several police forces, with a light helicopter, a Robinson R44 and two light fixed-wing aircraft. Whilst the drones proved to be useful in a static situation it was the manned aircraft that proved to have greater utility when searching a large search area.

aircraft that proved to have greater utility when searching a large search area. From my own experience, as former RAF reconnaissance pilot and a former member of the police North East Air Support Unit, the value of the airborne observer should never be underrated. Quite often it is the observer, or the pilot, looking out of the window, who will direct the camera onto the target. Moreover, those drones that are currently used by the police are restricted, by law, to operate not above 400 feet and within sight of the operator on the ground. There is also a flight restriction, the result of finite battery life, of around 20 minutes, and some drones cannot be used if it's raining! Mr Bonner suggests that Essex can be provided with air support with 19 drones and 65 pilots. The former North



East Air Support Unit provided very effective cover, 24/7 and in all weathers, day and night, over the whole of Northern England with one aeroplane, 4 pilots and 8 police observers. Yes, drones do have value in certain circumstances, but to suggest that they can replace manned aircraft is, I would suggest, no more than 'pie in the sky'!

Yours sincerely,

James A Cowan MBE Durham Squadron Leader Royal Air Force (Ret'd) 20

MOVE ALONG THERE

The downside of police aviation

One of the oft repeated mantas at PAvCon is do not promise a skill you cannot undertake. It normally relates to such high intensity training skillsets as search and rescue and hoists, but it is just as relevant across the board.

Sympathy then for Gwent Police who in mid-June announced they had taken delivery of a new super capable drone that had cost them £20,000 but apparently was just what they needed in wet and windy Wales. For days afterwards the unit boss, Inspector Gavin Clifton, was out explaining how the cutting-edge technology of their Evolve Dynamics Sky Mantis would help the police in many ways.

The Sky Mantis offers longer than usual endurance [up to one hour] and features two cameras – one a high-definition camera with a 30x zoom and the other a high-end thermal camera which is able to see in the dark.

Unfortunately, all this hype descended into ignominy just two weeks later and it was widely reported that the sergeant on the unit managed to fly the craft into a tree and get it well and truly stuck. Further deepening of red face in that Gwent Police had to call in the local fire brigade to climb into the tree to retrieve the craft.



Memo to Drone Operations. You may need to add the following elements to your wish sits for an autonomous unit... additional training may be required.

I noticed in an image of a Gwent Police sergeant featured in an earlier press release on the new drone that the sergeant had gained a pretty unique divisional number styling in that his shoulder number 1247 was preceded ASU. Grab the moment! I do not recall any 'real' helicopter unit ever being that bolshie.

CAREFUL WHAT YOU WISH FOR

A recent conversation confirmed that the thoughts of the police and the public are often in synch. When the question of the future of Lippitts Hill after the helicopters move out slipped into a chat it was apparent that the politicians remain way off the mark.



For years they complained about the noise of having a police presence [cadets, dogs, guns, helicopters] on this large a verdant hilltop spot. It was the local politicians in the main that successfully drove away the dogs, guns and employment prospects from the former military camp, now negative economics have led to the sole surviving residents, the NPAS helicopters, leaving next month.

The site may linger until the arrival of the Emergency Services Network in 2023 [and counting] but who yet knows what horrors the site sale will unleash upon the neighbours of this otherwise tranquil square of green?



HALT WHO GOES THERE?

At every international meeting of minds events like PAvCon there is a learning curve, sometimes it is steep, sometimes shallow, but always I come away with a new fact or fancy.

For a long time now I have noticed that, for me and other foreigners, it was difficult to enter the United States. Equally I have noticed that it is not too easy for a born and bred United States citizen to return to their own country.

For those that have chosen to be a citizen of America and have perhaps even renounced their former birth right it is clearly even more difficult. Visibly so when it comes to the TSA queue at entry airports.

We here in the European Union have long enjoyed ease of passage between the individual nations. Today most Euro borders are drivethrough or at worst guarded by e-gates that let

us pass apparently unhindered by anything other than sheer weight of numbers. Yes, we hope there are watchful human eyes on the flows and that those e-gates are seeing everyone for what they are but, on the surface, it is so easy.

As from the start of June the citizens of a tranche of nations, including Canada, Singapore and the USA, have been allowed to enter Europe using the e-gates. A couple of Americans commented on the ease of entry. All this may then further impress on them just what a bad deal they are getting from the US Secret Service and the TSA. The revolution may well be some time off in a nation that generally does not travel beyond its own borders and therefore well used to being treated badly.

In fairness though, it is still a bit of a chore for foreigners to enter Singapore but they at least welcome their Nationals with a quick and easy system.

YOUR COUNTRY NEEDS YOU

But there was another learning curve in the general chatter between nations and that includes the whole process of hiring and firing police officers in general.

The police staff in the United Kingdom may from time to time complain about bullying and abuse within their service. Although I as a fellow Brit, with my birth background and now distant police service might well agree at how bad it is I also know that things are not that bad at all when you take into consideration the rough road others have to negotiate.

On the last night of PAvCon Europe in the superb Renaissance Hotel Amsterdam Airport a small international group of police, civilians and those with a military background were chatting over their last meal together. The conversation got around to how US police officers were selected. Yes, we knew you - or assumed - they had to go on a degree course and to pick up on local legal variations in further schooling every time you moved employment, but the horror was in the detail.

When the American cops told us the detail of their selection process the jaws of three Brits dropped. We were aghast.

To join most agencies the individual has to submit to some processes that seem alien to British eyes. In order to become a law enforcement officer, there is a strict hiring process that includes several critical steps. A written test, a physical agility test and some delving into the background of the applicant are nothing new. For most of the positions they will be required to undergo and pass a polygraph test and more. Most Law Enforcement Agencies will conduct a "Truth Verification Exam." The two most common forms of this test are the Polygraph and the Computer Voice Stress Analysis (CVSA). While both methods are controversial, law enforcement needs some way to insure the honesty and integrity of its members. Not that these are well thought of in many other countries and found to be infallible in the USA. If they were as good as they are credited there would be no wayward officers.

How anyone passes a polygraph is a complete mystery. The usual commencement question is something





all-embracing like "Have you ever done anything wrong?" How might any red-blooded person answer that truthfully?

As if these wonderful processes were not enough, the next move is quite likely to be a knock on the door of the candidate's home, a warrant and a minute search. I repeat my comment about there being no way-ward officers. I doubt the level of wayward US police varies greatly from other less stringent and intrusive methods.

In many agencies it is mandatory for all candidates to be subject to the effects of a Taser gun strike. The theory is that if you are dishing it out you should know what it feels like. Perhaps fortunately there is no record of an agency requiring candidates to be shot successively with a .38 round, a .9mm round, 7.7mm and a shotgun to achieve similar resulting knowledge. I can testify that in 1965 I was not severely beaten with a lignum vitae truncheon by my colleagues so I could learn from it.



If that were not enough, some agencies require repeated polygraph tests and Taser strikes for previously qualified staff transferring in. Not too promising a requirement for those seeking career enhancement by multiple changes of agency.

Mind you if I was aware that every chief constable in the UK had been tasered and beaten multiple times to achieve their elevated status I might gain great respect....

EVENT REPORT:1

This year the 11th PAvCon Police Aviation Conference was held in the Renaissance Hotel, Schiphol Airport, Amsterdam.

It was not planned that way but there were no aircraft and exhibitor space really was at a premium. Despite the negative elements it is fair to say that in terms of networking and business contacts made many consider the overall event was a success. A short report and access to some of the presentations can be found on the dedicated website <u>www.pavconeurope.eu</u> Another version of the report is appended to the rear of this issue of PAN.

EVENT REPORT:2

A few days later and over in England a new event was added to two long standing existing events – Aero-Expo UK and Heli UK Expo. The new arrival was the 13-14 June Multi-Mission Expo & Conferences at Wycombe Air Park, close to High Wycombe to the west of London.

Both AeroExpo UK and Heli UK Expo have been around for some years and PAN has exhibited there in a small way in the past. They are General Aviation shows and have appeared at several different airfield venues in the past before returning to Wycombe. One of the early PAvCon events was co-located with a similar event operated by the same people in Pribram, Czech Republic back in 2010. So, the core event has an emergency services aviation pedigree.

Multi-Mission Expo & Conferences (AMME) was an add on to the core show for the first time, although there have been several differently titled clones in the past. Like all the predecessors it struggled to attract the broad spectrum of exhibitors it sought to bring in front of the public.

The published areas of what AMME was all about included a very broad brush of air ambulance, aerial mapping, aerial photography/filming and survey, agricultural, forestry, fire, utility, border and maritime surveillance and monitoring. That encompasses much of where the PAN/PAvCon model sits and is likely therefore to be of interest to that market. The organisers of PAvCon and AeroExpo UK strive to ensure they do not clash on dates simply because the underlying aims are the same and few exhibitors can afford to attend both.

Some of the exhibitors attending nominally addressed the market but clearly it has a long way to go to go for the organisers to declare AMME a total success.

Industry is currently contemplating its navel and long gone are the days when they will take a risk. The reported widespread negative attitude of industry towards the new Farnborough based version of Helitech Vertical Flight Expo and Conference does not bode well for any start-up projects.

AeroExpo is primarily about aircraft so those you can expect plenty of. What the AMME brought to its start





-up element of the wider event were a number of surveillance specific airframes that certainly achieved the aim of the AMME focus – although not all were role equipped.

Britten-Norman, Diamond and Tecnam were exhibiting aircraft and talking surveillance when prompted but they were somewhat removed from the hangar where the talking parts of AMME took place. The displayed ECARYS was on the button and premarketed through the house magazine for the event - GA Buyer as a European border patrol aircraft. That type was also removed from the AMME focus hangar.

Within the hangar could be found Kent based Adams Aviation and the Gamston based Diamond surveillance aircraft operator DEA. They were perhaps role focussed but the others present there were make weights, the Airbus H130 in pride of place was just there as an airframe with no apparent effort promoting multimission anything, the same applies to the R44 and the Guimbal Cabri G2 trainers. It is tempting to wonder whether they were in the hangar simply because the owners paid more for their inside spot.

All in all, most of the stated interests of the event were absent so there is a large hole to fill. Nonetheless the event certainly has promise but it will need more focus and attention to detail alongside some sensor marketers if not the likes of FLIR, Wescam, Hensoldt, Euroavionics, etc etc to give the focus credence. Ultimately it would probably pay to attract role specific exhibitors on site cost free to get the show properly launched. And even that does not always work!





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These things take time.

THIS MONTH INTERPOL WORLD 2019

I hope to bring a report from this niche event in Singapore next month. As carried in recent editions of PAN the adverts apparently say it all but lam attending this early July event to assessitslinks to aviation. Yes there will be drones apparently but the rest?

APSCON EVENT USA

15-20 July 2019 APSCON The 49th Annual Conference & Exposition. CHI Health Center Omaha 455 N 10th St, Omaha, NE 68102, USA. APSCON 2019 in Omaha will continue to set the standard for excellence in the field of public safety aviation [the former ALEA]. Filled with education and training, APSA will again offer some of the best conference courses and classes in the industry, presented by the experts. The exhibition floor is a great venue to check out the latest, cutting-edge technology for public safety aviation, in addition to providing a great opportunity to visit with peers. Exhibitors will showcase their products and services to aviation unit decision-makers and end users, while creating an exceptional learning environment, in one central location. The event includes much loved social events sponsored by corporate supporters.<u>www.publicsafetyasviation.org</u>

The event uses the HILTON OMAHA (located directly across the street and attached via a skywalk) at 1001 Cass Street, Omaha, NE 68102 +1 402-998-3400 Discount Rate: \$134/Night; (Single/Double), plus 18.16% room tax (current tax rate, subject to change) Discount Deadline: June 25, 2019. Check out the APSA website for the details. There is a Hotel Airport Courtesy Shuttle Available, on request (Omaha Eppley Field). A taxi would cost \$11 one way. Parking On-Site: \$15/Day Self-Parking/\$21/Day Valet The alternate/overflow hotel is the OMAHA MARRIOTT DOWNTOWN at the Capitol District at 222 North 10th Street, Omaha, NE 68102 +1 402-807-8000. This offers a similar Discount Rate: \$134/Night; (Single/Double), plus 18.16% room tax (current tax rate, subject to change) Discount Deadline: June 25, 2019. Check out the APSA website. Hotel Airport Courtesy Shuttle Available, on request taxi and parking as above.

UPCOMING EVENT

The Emergency Services Show in September used to be all about fire engines, tools of the trade and uniform as but that is not half modern enough. Now Health & Wellbeing has slipped into prime place. The newly discovered worry about the mental health of the emergency services is set to grip the audience. The importance of health and wellbeing issues, especially mental health, among all those serving in the emergency services and allied organisations returns as a key theme of the event taking place at the NEC, Birmingham from 18 to 19 September. The organisers have announced a string of speakers for its Health and Wellbeing Seminar Theatre.

The Emergency Services Show will feature four dedicated theatres on the show floor hosting a wide range of thought-provoking, CPD-accredited seminar sessions over the two days of the event. The four theatres will focus on Health & Wellbeing, IT developments, Emerging Technologies for the emergency services and Lessons Learnt from operational incidents. The full two-day seminar programmes can be viewed at: https://www.emergencyuk.com/seminar-programme#/

In *#its ok to talk* Andy Elwood a former search and rescue paramedic, shares the mental health impact that traumatic events have had on his own life. He'll discuss how emotions of despair and elation are more difficult for men to talk about and how he releases his emotions in a positive way to stay healthy. British Red Cross will give an update on its Resilient Responders Programme which aims to build individual and team resilience through a range of psychosocial support and interventions.

The Police Federation of England and Wales will talk about the findings of the first-ever survey looking at how the menopause affects police officers and staff in the workplace, and how the findings can be used to facilitate better support and inform future policy and guidance.

Jennifer Hill, Watch Commander with West Midlands Fire Service will share the experiences of a primarily female fire service team deployed in civil war-strewn South Sudan. She will show how lessons learnt from the deployment can be applied to fire safety and community engagement in the UK.

Ben Miller will introduce the Christian Ambulance Association and the support it offers to staff working in ambulance services and throughout the blue light sector.

Oscar Kilo will be updating visitors on its National Police Wellbeing Service and talking about the "wellbeing van" it is bringing to the Show. This is one of a fleet of bespoke-fitted vans which can deploy to operating bases across England and Wales, offering physical, psychological and financial health checks to

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officers and staff, supported by occupational health staff from each force area.

Jules Lockett, Practice Learning Manager, Control Services with the London Ambulance Service NHS Trust will discuss staff resilience in "Not Just A Voice".

Police Care UK will share the findings of a national police survey it undertook with the University of Cambridge which found that one in five police are suffering with a form of PTSD yet 83 per cent don't even know it. This session will talk about the practical steps that police can take now to improve their trauma resilience and training.

And more...

The Emergency Services Show exhibition features over 450 exhibiting companies including leading names in vehicles and fleet, communications, technology, medical and fire fighting equipment, search and rescue, extrication, water rescue, first response, protective clothing and uniforms, public safety, vehicle equipment, training, community safety and station facilities.

In the networking hub of the show, The Collaboration Zone, over 80 emergency services, voluntary groups, charities and NGOs will be sharing details of the support they offer. Organisations involved include The Ambulance Staff Charity, Christian Ambulance Association, Disabled Police Association, Oscar Kilo, Our Blue Light Charity, Police Care UK, PTSD999, St John Ambulance, the Fire Fighters Charity, UK Firefighters Sailing Challenge and the UK Hypnosis Academy.

The Emergency Services Show is free to attend including the exhibition and CPD Seminars. Parking is also free. To find out more and register to attend visit <u>www.emergencyuk.com</u>

18 Aug 2019 [Sunday] The 5th World Helicopter Day. This is the fifth year of the event with rolling open days around the globe. Call is out for event locations coming up for this year. Goal is to promote the industry in local communities around the world and achieve some PR both locally and internationally for what helicopters (and the people in the industry) do for society. Website: <u>World Helicopter Day - Celebrate Vertical Flight!</u> FB: <u>https://www.facebook.com/pg/worldhelicopterday/</u>#worldhelicopterday

PAvCon Europe

4-5 June 2019 Schiphol Airport, Amsterdam, The Netherlands.





Another PAvCon Europe successfully tucked away.

Despite a little organizational trauma along the way this one has picked up the accolade "Best ever" if only for the lack of complaints from those taking part. It is fair to claim that a great time was had by all. And later developments tend to suggest that the

As ever, the thanks are all down to the stars of the show – the speakers – whether they are the veterans or new to the event. The speakers and presenters are the educators that everyone comes to see, closely followed by the chairman and support staff. They are all part of the whole brand will go on. We have hosting bids for 2020, 2021, 2022

Thanks to the enthusiasm of the participants in getting PAvCon to be the 'Best of its type' – even if that is pretty unique in Europe no matter how it is viewed. Due to a late change of venue from a capacious hangar to a bijou hotel meeting room, the event was crammed into a relatively small space but that gave it an added boost in that most presentations were visually to capacity audiences.

All the regular speakers excelled and even the many presentations most of us have heard before came across as crisp, newly updated and modern. Such is the format and the ever changing venues for the event across Europe, the numbers in the audience who have heard and seen it all before are very few.

Cramped conditions also affected the exhibitors but uniquely this year there has not be a single complaint about anything. The lack of space resulted in the numbers of exhibitors being guillotined towards the end and a number of prospective representatives of industry were obliged to resort to walking the show with their cards and brochures. Of the major manufacturers only Bell were able to get a space to call their own. Nonetheless Airbus, Bell and Leonardo were prime sponsors.

For many the event stretched through the first week of June with those involved arriving and leaving at different times. The real work started on the Monday with a training day held within the secure classrooms of the police air unit at Schiphol. The location required that it was exclusively an event for serving police officers. Although PAvCon facilitated the prime instructor attending from Texas that is the extent of its connection to the main event.

Away from the police facility Monday was also set-up day for the event at the hotel – the conference and the exhibition.



This year the event had John Osmond [left] as an able new chairman replacing Gareth Davies after some twelve years. He is no stranger to the PAvCon formula, having taken on the role of regular speaker many times. A great replacement who has long understood the unique PAvCon formula of interaction of equals between the police as customers and industry as the supplier.

Mireille Lokhorst-Melchers, the Accountable Manager, Chief of the Aviation Police in the Netherlands for the last few years welcomed the gathered delegates and shared her thoughts on the role and industry in general. He joined the role without any significant aviation experience. She now has knowledge upon which to base her opinions.

For the next hour, and for a similar period on the following day, Bryan Smith the Safety Consultant for the Airborne Public Safety Association [APSA] talked flight safety. At the core of his and other presentations is crew members working together is flight safety and mutual cooperation to mitigate emergencies. The two successive days of a multi-faceted CRM/FRAT/SMS/IIMC presentations from experts in the field was well received.

We often question why the European police aviation community so readily embrace the arrival of American police aviators to tell them how to fly safely and efficiently. There are plenty of clever European police aviation professionals but, individual inclinations to perform aside, is has been difficult to get their employers to release them to be trainers. Each time we have to await them retiring from the police service – at which point their perceived credibility wanes.

The result is that the American's and other nations are welcomed.

On the technical side there is always a balance to be made between the critical advice on police air operations in the USA where they operate single pilot with a single Tactical Flight Officer [TFO] or another pilot and civil police air operations where many work twin engine aircraft single pilot with a TFO. Many in Europe have a focused belief that the second engine provides them with an automatic fly-away guarantee. For some the realization is dawning that when the engines share the same gearbox and fuel supplies that guarantee is flawed.

For the second year PAvCon was again able to welcome a number of officers from Turkish Police Aviation, who presented on human trafficking.

Updates on unmanned aircraft - drones and the like – where again the speciality of Dave Domoney the former Royal Canadian Mounted Police sergeant who developed drones for the police there. Canada is a massive remote country with a few aircraft and helicopters and for vast areas the only possible police aerial cover is the drone. This led to the country having the largest number of drones in police service and promoted options to undertake experimentation in the craft and how to stop them. The main thrust of this years presentation was outlining the measures to halt drones.

A negative aspect on the high status in the drone world of the RCM|P in Canada post Domoney is that his replacement has suddenly retired, giving some worries about continuity.

The following day drone use by the Netherlands Police and Military Services was comprehensively covered by Tjeerd Tiedeman, the Dutch Police UAV coordinator and a long standing military delegate attendee Haiko Kroeze.

The pair put to bed the prime reason why the Netherlands discarded the use of birds of prey in countering drones. For some time now it has been suggested that it was a bird safety issue but the real issue was the cost. Obtaining eggs to breed the birds was expensive, setting them up the cages that were their homes and paying for their 24/7/365, keep and training was equally prohibitively expensive. And to achieve what and when? It is clearly far more sensible to seek a technological answer that did not demand such close attention.

The first time in Europe trainer on the Monday was Lt. Clay Lacey of the Texas Department of Public Safety, Air Operations Division, in Dallas. The original sessions had taken all day but he gave a taster session to the attendees at large on the second day covering Crew Resource Management for Law Enforcement.

He brought to the event unique on-board EO/IR camera turret footage of a helicopter entering and leaving IIMC. The footage was timely in that the thrust of this years event was seeking means to train non-flying crew/TFO members to assist single pilots in time of emergency.

The footage was captured during an operational search in Texas. The helicopter was on the cusp of directing officers onto their target below when the helicopter was enveloped in mist and the scene below was lost in mist. It was time for the aircrew to lift to safety. The unidentified male TFO can be heard to change his tone of voice from the authorative gruff that had been directing colleagues to a new quieter and softer tone. Now the voice sought to quietly inform the pilot of height and speed until at last the obscuring mist passed from view.

It is clear that even the negative aspects of the event – the change in venue and lack of space - worked in the favour of this year's PAvCon and much of it due to the sterling efforts of the Renaissance Hotel staff who were themselves learning so much from this year's Conference and Exhibition event, the first since they opened last year.

Feedback from the hotel and staff is also important, they have consistently said they thoroughly enjoyed working with our crowd and would actually love to host us again. That is an accolade for everyone concerned but, as the hotel knows, we tend to go somewhere new every year. That said Adrian and I have a date back there so we can take our wives to the great Windmill restaurant near the hotel. Leonardo sponsored the speakers meal there this year, but this time it is on me!



A great culinary experience

One event that not on the script was the announcement by Dan Schwarzbach the CEO of the Airborne Public Safety Association [APSA] that the European event had won an award. It was a shock five minutes, but I consider that this is the recognition of the efforts of everyone concerned over the years – including many individuals no longer directly involved – in thrusting forward PAvCon for the greater good over the past decade and more. Nothing could have been achieved over the years without everyone.

I have already taken on board some of the content suggestions for next year but that is for honing in about 360 days time! The recent experiences of PAvCon working with industry hosting the event have not been too positive, both last year in Poland and this year at Schiphol have been unnecessarily traumatic. That may colour reactions to proposals to go with industry but it will not cancel hem out.

Thank you once again.









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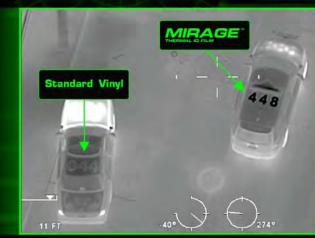
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