

Police Aviation News

©Police Aviation Research

Issue 281

September 2019



UK P68R - the final stages?



Ireland HEMS now operational
PC-24 - the Ambulance of choice
Cormorant mid-life is go
SAR-H Assessed - Report
Picking Them Up - Ground Handling

LAW ENFORCEMENT

PHILIPPINES

NATIONAL POLICE: On July 25th Robinson Helicopter Company delivered two R44 Raven IIs to the Philippine National Police (PNP). The aircraft were purchased through Robinson's long-standing dealer Lionair Inc. based in Manilla. It was stated that this was the first acquisition of Robinson helicopters by the Philippine government [but see below].

The PNP is the armed civilian national police force tasked with law enforcement throughout the Southeast Asian country's 7,000+ islands. The acquisition is part of an overall effort by the government to strengthen and expand its law enforcement.

Upon their arrival in Manila, the R44s will be turned over to the Special Action Force Aviation Unit (SAF-AU) to be used for training. Police Lt. Colonel Ruel Zalatar, Chief of PNP-SAF-AU, who has logged significant time in various rotorcraft, believes the R44 is well suited for training and enhancing police-related skills namely surveillance, patrol, and aerial reconnaissance. The R44's ease of maintenance and low operating costs allows more pilots to receive additional training before moving up to the fleet's higher category rotorcraft.

Ed: Selective memories are definitely in gear. Despite the statement by Robinson, these are not the first R44 to appear in Philippine Police Service.

Back in 2010 the then SAF-AU commander Director Leocadio Santiago took delivery of what were believed to be three brand new helicopters at Camp Crame, the PNP HQ.

A year later that purchase went very sour when it emerged that the trio were not all that they seemed. It emerged that they were somewhat older than was being represented. Of the three two of these were pre-owned and had 498 and 536 hours on the airframes This led to a great deal of acrimony followed by wide scale punishments and sackings in 2012.

In June 2012 the Ombudsman filed graft charges against Jose Miguel "Mike" Arroyo, former National Police chief Jesus Verzosa, a businessman, and 19 retired and active police officers over the sale of second-hand choppers to the Philippine National Police.

The Robinson choppers turned out to have been previously owned by Mr Arroyo, husband of former President Gloria Macapagal-Arroyo, according to the Ombudsman probe.

In November 2015 the Philippine Senate agreed to increase the proposed 2016 budget of the PNP to enable the refurbishment of a pair of R44s purchased in 2009. The Robinson's had been grounded for several years as they were subject of a court case surrounding the manner of their purchase. By then the third aircraft, a Raven II, bought new from the factory had been written off in June 2013. So even if some leeway in the Robinson statement can be accepted over the two older machines, one was a factory purchase.

UNITED KINGDOM

NPAS: The UK's National Police Air Service (NPAS) has entered the early stages of a fleet renewal process. According to tender documents, they have been surveying the market to assess availability, capability and cost of different rotorcraft types.

The Flight International associated Cirium's Fleets Analyzer lists the NPAS as operating a 19-strong Airbus fleet, 15 H135s and four EC145s. The oldest are 17 years old, another six are more than 15 years old.

NPAS has declined to comment on its fleet strategy. Flight see it as unlikely that any new helicopters will be used for fleet expansion. When the NPAS launched in 2012, it had 25 helicopters across 23 bases, against 19 at 15 locations presently. The market evaluation runs until 3 September. [DP. Flight Global]

Ed: I have used the Flight figures as given but dispute the numbers. There are thirteen operational locations, I do not yet count Doncaster as it is not operational or Boreham, simply because it has gone. Flight was misled, the NPAS website carries information in that it still states that the "The National Police Air Service run a fleet of 19 helicopters from a network of 15 bases across England and Wales."

In the past month the operation has been advertising its need for additional fixed wing pilots. West Yorkshire Police announced the job offer at the start of August with the last applications to have been made by September 1.

COVER: This month several new images of the NPAS fixed wing fleet have emerged from the operator and private sources as, finally, the aircraft are working up towards the latest January 2020 deadline. The images do not resolve the final FIKI certification problems but they do indicate that the hollow echoes from inside the Doncaster hangar may have gone. This shot of the NPAS Vulcanair P68R G-POLZ appears to have been taken in front of the Doncaster hangar. [NPAS]

PAN—Police Aviation News is published monthly by
 POLICE AVIATION RESEARCH, 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK.
 Contacts: **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** BrynElliott or +44 20 8144 1914
E-mail: editor@policeaviationnews.com and admin@pavcon.org and policeaviation@hotmail.com

24 years

Police Aviation Research Airborne Public Safety Association Member since 1994—Corporate Member since 2014

SPONSORS

Airborne Technologies
 Broadcast Microwave Systems
 CarteNav
 FLIR Systems
 L3 Wescam
 Powervamp
 Trakka Searchlights

www.airbornetechnologies.at
www.bms-inc.com
www.cartenav.com
www.flir.com
www.wescam.com
www.powervamp.com
www.trakkasystems.com

Airborne Public Safety Association

www.publicsafetyaviation.org#

Pushing an aircraft out into the sun does not mean that it is capable of flight.
 However, the P68R does fly!. Reader Graham Miller captured the NPAS Vulcanair P68R G-POLX on a sortie from Doncaster in August. [Miller]



The call was for Line Pilots (Fixed Wing) to operate from Doncaster Sheffield Airport on four days on, four days off 12-hour day rota subject to Flight Time Limitation (FTL).

The applicants need a minimum of a Commercial Pilot's Licence (Aeroplanes) with RT Licence, a valid Multi-Engine type or class rating (single pilot aircraft), a valid Single Pilot, Multi-Engine Instrument Rating with a Performance Based Navigation endorsement (IR-SP-ME Class SE + PBN), a minimum of 1,500 hours total flying time and be in current multi-engine practice, which must include 500 hours as Pilot in Command (PIC) single pilot aircraft fixed wing, 100 hours IFR of which 25 hours to be PIC.

I note that they have clarified that annual leave is 19 days (19 x 12hr shifts) as this caused confusion in a previous iteration – it suggested more days off and led to new (helicopter) pilots resigning and going elsewhere.

Ed: Assuming they attract and maintain the required number of pilots – and they are competing head on with airlines and other surveillance operators – it might be assumed that the persons so employed will not be available to start flying before October and then working up in November for a potential January 2020



Parapex Media

Marketing, Social Media Management, Website Design, Press and PR
 dedicated to the Aviation Industry

www.ParapexMedia.com

start of operations. Helicopter £55,305-£58,287 per annum in 2018 and 2019, the fixed wing pilots' posts are on a similar rate. Currently these are average rates notwithstanding the upward pressures noted in recent weeks. In recent days NPAS have advertised vacancies in four locations in addition to fixed wing so retention of pilots is clearly a problem for them.

PAN has mentioned previously that NPAS have been obliged to keep their existing fixed wing pilots current by leasing in flight training from an outside body. Details are now available.

ACS Aviation based in Perth, Scotland have been providing NPAS fixed-wing flight time, NPAS has received four new Vulcanair P68R aircraft and while the organisation works to achieve certification for them, fixed-wing pilots have added to their hours in leased aircraft.



Captain Paul Watts, Chief Pilot for NPAS, said: "It's essential our fixed-wing pilots retain their flying currency, including vital instructor ratings, while we await air worthiness and police operational certification. Using a leased aircraft has allowed us to do that. Pilots have been flying from NPAS Doncaster, which is where our new aircraft will deploy from in support of police forces across England and Wales."

NPAS have been working with Cloud Global Group in 2019. The group's subsidiary company, ACS Aviation, has provided NPAS fixed-wing crew with ongoing support and access to their DA42 Diamond Twinstar fleet. This allows NPAS fixed-wing pilots the opportunity to continue flying and maintain currency. The twin engine aircraft is fully equipped with Garmin G1000 avionics similar to the Vulcanair aircraft allowing NPAS crews and engineers to familiarise themselves with the systems and operating procedures.

Craig McDonald, Technical Director at ACS Aviation, said: "We are committed to supporting and developing our ongoing relationship with National Police Air Service. Our agreement with NPAS is a testament to ACS Aviation's ability and commitment to provide our customers and partners with the most comprehensive aviation solutions."

Ed: ACS Aviation offer flight training and aircraft maintenance services across the UK and have facilitated similar lease arrangements with government agencies to maintain twin engine currency.

www.acsaviation.com

So, the crews with aircraft that work intermittently have been keeping their hand in flying leased examples of the DA-42.... one of the types that was rejected in the first place!

In fairness there are no identical P68s readily available for them to use.... the retractable gear is rare.

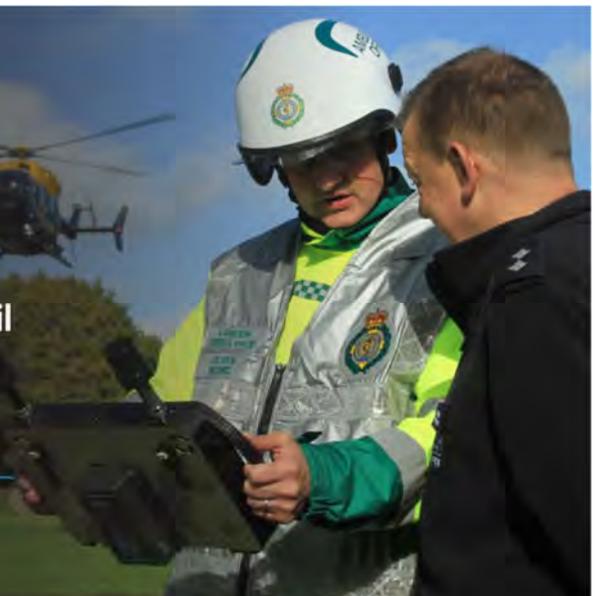
There are P68s potentially available with such as Ravenair in Liverpool, but they have fixed wheels, different instrumentation and are not ice certified.

The DA-42s they use have retracting wheels and identical instrumentation [Garmin 1000]. The type includes IFR certification including flight into known icing but that may vary from airframe to airframe of course. Critically in the Diamond airframe the low wing is beneath the sightline, but these are strictly sorties for pilot currency training sorties not operations. If the long-standing fixed wing pilots had hopes of increasing their flight hours significantly during employment with NPAS they will have been disappointed.



Our new High Dynamic Range capability allows objects to be shown with new levels of clarity, resolving detail on subjects in low light or back-light situations across all lighting conditions.

E: sales@vislink.com | **W:** www.vislink.com



NPAS FIXED WING—BACKGROUND REFRESHER

It seems to have been going on longer than Brexit—and it has—but not everyone has been paying attention so this is a catch-up piece for them.

In the Strategic Board Minutes of December 2014, it was stated that the decision to purchase three fixed-wing aircraft was authorised in 2014 with a budget of £6.16M. This was preceded by a 6-month trial of the Vulcanair P68R, supplied by Airborne Technologies [ABT] in Austria, in 2013.

Although other manufacturers [Diamond with their DA-42 and BN with the Islander] were invited to tender they were effectively excluded by the wording in the tender document that excluded their aircraft types. Theoretically a competitor to ABT could bid but it would have to be on the basis of the P68R, a type the manufacturers had only ever marketed as an executive transport or twin-engine trainer. To date ISR was not being greatly promoted although there were low specification surveillance airframes in police use.

“The aircraft is to be a high-wing with retractable landing gear, multi-piston engine, spark or compression ignition variant to ensure availability of spares and Subject Matter Experts (SME) for maintenance and diagnostic purposes. A low wing airframe does not allow complete visual coverage of the area of search/operation when conducting tasking out of the windows. Both pilot and TFO need to be able to see the area of interest at all times during standard airplane manoeuvres, unobstructed. Fixed landing gear prohibits the operation of the turret-mounted camera at low deck angles of operation thereby reducing the effective operational height of the aircraft due to obscuration.”

There had been a period of try before buy in 2013, and yet six years later there are four P68Rs, in police colours, in the NPAS hangar at Doncaster. A primary omission in those minutes was mention that they were clear weather aircraft designed and produced in Italy and would need modification to be able to fly in bad weather in the north of Europe. They have achieved part of their modification and certification task but to date they are awaiting full and final certification for the most important part of their task, flight into known icing [FIKI] under IFR. The sticking points on final clearance are an ability to meet the single engine climb rate and weights. Time and again I hear that the P68R will never meet the certification requirements for the single engine climb rate, but someone somewhere clearly believes that a miracle is in the making.

Without FIKI the P68R remains a clear weather aircraft that might only offer a limited availability. Chocolate teapots. There was an option to buy the airframes and for NPAS to undertake to develop the FIKI. Ollie Dismore, virtually the only one present with aeronautical knowledge, advised against buy and develop. Fortunately, the others took that advice and the onerous task was divested in the contract with ABT.

It is worth noting that, according to the Minutes, operating fixed-wing and helicopters together would be a first! It just illustrates the total lack of aviation awareness this project has exhibited from day one. The North East Air Support Unit (NEASU), for one was doing just that for ten years just up the road from Wakefield. They were using a BN Islander and, successively, a range of helicopters, Bolkow 105, Twin Squirrel and EC135, long before NPAS fixed wing was even a ‘pipe dream’! In addition to that, Cheshire and Merseyside were co-located at Speke [John Lennon] airport and worked together and several other units had used fixed wing when their helicopters were not available. There was lots of type specific experience on hand to be drawn upon, but it appears that was mostly ignored.

The main issue that seems to be the stumbling block with the P68 is the difference between the Maximum Take-Off Weight [MTOW] and the landing weight. Ideally the aircraft should be able to take-off with full fuel and return to land immediately if the mission is cancelled. That is what helicopters do and many fixed wings offer the same capability – but not the P68.

Of the contending aircraft the Vulcanair P68 variants including the P68C and the P68 TC Observer have a landing weight that’s different to the MTOW. All models of the P68 aircraft have the same landing re-



‘Old Timer’ BN-2 with Cheshire Police [©PAR]



NPAS ran a short trial of the Tecnam [©ABT]



The P68R trial found favour [©Correne Callow]

striction. With fixed landing gear the MTOW for the P68C is 4,594 lbs with a landing weight of 4,365 lbs. For the P68 TC Observer, the one with the 'glass' nose, the weights are the same. It has been estimated that once airborne the aircraft would be obliged to fly around burning fuel off for over an hour before it can land. With no official figures released it is impossible to confirm that.

Each of the current Diamond and BN aircraft are able to get airborne at MTOW and then, if the mission is aborted after take-off, return immediately to base and land. *Ed: See also 'Letters' in this issue.*



Already a regular visitor to North Weald on training missions the EC145 tried out the new base in August [©NPAS]

Last month one of the EC145 helicopters based at Lippitts Hill, G-MPSC, landed on the site of the new North Weald base for a photo-call even though it was then incomplete. Completion of the basic site should take place this month but there is no news on a moving date.

Time may be right therefore to highlight that NPAS again need a Base Manager. They are seeking applications from substantive Police Sergeants to act as Base Manager for the new base at North Weald Airfield which will replace the base at Lippitts Hill very soon.

Ed: No details available as the link goes to a secure West Yorkshire server. Well it used to be secure. This is apparently the same job that until a few months ago David Howell was occupying. It seems that whoever replaced him was not too enamoured with the job either. Meanwhile the Base Managers job at Birmingham Airport is mired in confusion after it was withdrawn from offer as it looked like the base might get the chop under latest five-year plan.

SCOTLAND: The inquiry into the fatal November 2013 accident in Glasgow, started in April, has now closed. Sheriff principal Craig Turnbull said he would make his determinations as quickly as possible.

Pilot David Traill died along with two crew and seven pub customers when a police helicopter crashed into the roof of the Glasgow bar.

A number of representatives for the victims expressed disappointment in the proceedings.

SOUTH YORKSHIRE: The woman described as a nude sunbather during a high-profile court case where a police MD902 Explorer was recording images of her activities is suing the police for £200,000 for invasion of privacy. In 2017 a police officer, Adrian Pogmore, was jailed for using an EO/IR camera to film her in her garden.

Ex-Page 3 girl Tracy Dixon, 54, claims the police caused her distress as they have not revealed how often she was spied on. She had only been shown a single recording from 2007. It is thought the recordings were up to three times a week for five years during good weather. It turns out that Dixon and Pogmore were at the same school in Rotherham at similar times. [media]



SEE MORE. DELIVER MORE.

AIMS MISSION SYSTEM SOFTWARE

- ITAR-FREE
- MULTI-SENSOR INTEGRATION
- DEPLOYED WORLDWIDE

CarNav SOLUTIONS

UNITED STATES

FEDERAL: Drone Aviation Holding Corp, a Jacksonville, Florida based manufacturer of specialized tethered aerial monitoring and communications platforms, has delivered an initial set of WASP unmanned aerostat systems in support of the United States Border Patrol (USBP); U.S Customs and Border Protection (CBP).

The delivery paves the way for USBP agent training and operational support services on the Southwest border of the United States. The procurement of the WASPs and operational support services was recently awarded under an exclusive teaming agreement and subcontract received from a U.S. government prime contractor.

Earlier this year Drone Aviation announced that WASP was selected by a prime contractor for the USBP; Customs and Border Protection (CBP). In June 2019, the Company was also awarded, and commenced providing, integrated services under a support contract. Drone Aviation expects to fulfil the additional deliveries of WASP systems and services to the customer by year end. [DAH]

CALIFORNIA: Despite some disagreement on the financial details, the Board of Supervisors approved a procurement plan for the acquisition of an Airbus Helicopters H145 for Riverside County sheriff's fleet. The request to acquire was approved in June, but the financial management was not agreed then. At that earlier meeting the case for the H145 cited its ability to reach a higher altitude, or service ceiling, during search-and-rescue and other operations, compared to the helicopters currently on hand. The H145 can also haul eight people, whereas the smaller AS350s carry four.

According to sheriff's officials, the previously estimated amount of \$11.5M did not match the price negotiated with Airbus Helicopters Inc., of \$12.52M. The discussion mainly related to whether the funding would resort to a bank loan or a cash purchase.

The aviation unit had examined a number of competing designs from Bell, Leonardo and MD Helicopters, but in the end, the H145 was seen as the obvious choice, based on the department's eight pilots' familiarity and comfort with the single-engine Airbus AStar AS350s already in use.

Although the origins of the two types are different [German and French] the pilots are familiar current focus in relation to the control panel, equipment and performance of the aircraft. Maintaining the synergies between the two types is advantageous, especially when the pilot needs to make a quick decision during an emergency. The department has invested substantially in Airbus inventory parts and maintenance training and that further underlines the decision to stay with the one manufacturer.

SOUTH CAROLINA: In the wake of its June 26 crash that destroyed the MD helicopter they were using the South Carolina Law Enforcement Division (SLED) based in Columbia, SC have been given permission to buy a replacement helicopter. The mission profile for the operation is to move heavy materials across the state, particularly during disaster relief efforts, as well as during support missions to locate missing children, old people suffering from dementia, fugitives, stolen materials and drugs.

SLED asked for \$2M to buy a used helicopter similar to the model lost during a take-off on a drug mission in Summerville. The crash left the operation with only two operational helicopters. The helicopter was insured and that should pay for most of the cost associated with acquiring the replacement machine.

Prior to 2016, SLED owned five helicopters, but they gave up two of them through the federal government's military surplus program because of rising maintenance costs and the age of the helicopters.

DSEI
10-13 September 2019
The World Leading
Defence & Security Event
ExCeL, London www.DSEI.co.uk

THE WORLD LEADING
DEFENCE & SECURITY EVENT

WWW.DSEI.CO.UK | [@DSEI_EVENT](https://twitter.com/DSEI_EVENT) #DSEI

CELEBRATING TWENTY YEARS

AIR AMBULANCE

IRELAND

IRISH COMMUNITY RAPID RESPONSE: Ireland's first charity-funded air ambulance were finally able to start operations at the end of July as a dedicated asset of the National Ambulance Service (NAS).

The Irish Community Rapid Response (ICRR) Helicopter Emergency Medical Service (HEMS), which is based at Rathcoole Aerodrome near Millstreet in County Cork, was called out for an operation hours later but was stood down on route.

The paramedic-led HEMS, which is expected to respond to up to 500 calls a year, offers a 20-minute flight time to a critical care facility to a 10,000 square mile area. It remains a complementary service to the nationwide HEMS operated by the Irish Air Corps. The new HEMS will be delivered by the HSE NAS in partnership with the ICRR at a projected cost of €2M a year.

The charity will fund the aviation service while the government, through the HSE, will provide the clinical staff - an advanced paramedic and an emergency medical technician - and the medical equipment and materials.

The red and yellow painted British registered airframe, G-SHLE is a 2000 build A109 s/n 11100. During the last 19 years it has served a number of nations under different identities and is currently with Sloane Helicopters Ltd., at Northampton. Despite being on the scene for 19 years it has just 3,100 airframe hours. www.icrr.ie



FLIR

**COMPACT CONFIDENCE.
TRUSTED PERFORMANCE.**

Compact, multi-spectral surveillance systems like the Star SAFIRE® 380-HDc and the ITAR free UltraFORCE 275-HD don't compromise on range to ensure your mission is accomplished. FLIR.com/Surveillance

KUWAIT

AIR AMBULANCE: Early in August the Ministry of Health obtained initial approvals for the extension of the contract for providing air ambulance and medical evacuation services – a contract was signed between the ministry and a local body for a duration of six months starting from the beginning of September.

The existing arrangements build on a project launch in 2015 and is currently on a contract extension period. The new tender includes new items in terms of the use of bigger helicopters with larger capacity for beds, doctors and paramedics.

There are currently seven helipads serving all of the hospitals. Last year the EMS dealt with 496 reports and 97 cases of medical evacuation last year.

NEW ZEALAND

SOUTH ISLAND: The air ambulance service received two Airbus Helicopters H145 in the middle of August. They are to be based in Christchurch and Otago and be used for SAR and air medical work as additions to an existing fleet based in Nelson, Greymouth, Queenstown and Te Anau. This is the first time the H145 has been used for air ambulance operations in New Zealand.

The £30M pair of new aircraft were unveiled at a ceremony in Christchurch on August 13. The cost was funded by the ongoing support of the ACC, the Ministry of Health and continued community donation and sponsorship deals in association with GCH Aviation and Helicopters Otago's joint venture Helicopter Emergency Medical Services (HEMS).

PAPUA NEW GUINIA

MISSIONARY AVIATION FELLOWSHIP: Free at the point of access air ambulances are a relative rarity across the world but there are some significant exceptions in the Third World where religious and charity groups provide support to the indigenous population using aircraft that give medical aid that includes free air transport.

Mission Aviation Fellowship is a Christian organization that provides aviation, communications, and learning technology services to more than 1,000 Christian and humanitarian agencies, as well as thousands of isolated missionaries and indigenous villagers in the world's most remote areas. It has been operating since 1945 after three separate groups were created by likeminded Christian individuals in the USA, UK and Australia. They were aware of each other at the time and now operate under the same banner, but the funding stream remains regional.

Each of the three are major aircraft operators in their own right. They have a staggering amount of money on call, mostly donated. MAF operate one of the largest fleets of the Cessna 208 Caravan in the world, said to be second only to that of FedEx, the latter reputedly have 238 of them so Cessna will be more than happy. Each fleet is different but clearly reflects a long-term interest in products from the Cessna factory. In addition to the 208 Caravan each fleet has examples of the 172 and 206 but those fielded by the USA and Australia have even greater variety including examples of the 185, 182, 207 and 210 as well as the GA-8 Airvan, Twin Otter, Pilatus PC-12 and Kodiak.



And the rate of fleet renewals will make them ever popular with the aircraft sales team. In PNG alone MAF reputedly bought six new examples of the 208, and left two parked up in Mareeba, Queensland until they were ready to use them. There was still one there a short while ago awaiting a call to service. And reflecting a focus on the 208, recently MAF in Mt. Hagen PNG installed a new 'Redbird' flight simulator for Cessna C208 Caravan type ratings, IFR renewals and general orientation procedures.

The Australian fleet is the largest, latest figures giving 135 airframes which dwarfs the USA fleet's 46 by some margin. MAF flights support indigenous churches and local evangelists, create access to medical care, provide disaster relief, and make community development projects possible ... in some of the most remote places on earth. [Pprune]

SWEDEN

SVENSKT AMBULANSFLYG: From 2021 the Swedish air ambulance operator Svenskt Ambulansflyg will take delivery of six PC-24 twinjets from Pilatus, making it the first European operator to acquire the type for emergency medical transport.

The cost of the deal was not disclosed but the list price the base airframes would suggest a cost in excess of \$64M.



TURKEY

The Minister for Health in Turkey, Fahrettin Koca, has stated that Turkey was only country in the world with free air ambulance services for its citizens both in the country and abroad. The claim was made in a video Tweet relating to the air transfer a Turkish woman who suffered from a leg fracture in Italy to Turkey.

Turkey operates four fixed wing aircraft seventeen helicopters as air ambulances and in the past decade they, and six marine ambulances, have served some 43,000 patients of which some 637 had been repatriated to the home country for treatment. These were mostly pilgrims travelling to Saudi Arabia and expatriates living in Germany and France. [Yeni Şafak]

UNITED KINGDOM

DEVON: Among the air ambulances to receive a share of the £10M government capital funding money recently offered Devon Air Ambulance (DAA) has announced that they have been awarded £226,061 in capital funds.

For Devon the funds, administered by the Department of Health and Social Care (DHSC), will enable DAA to purchase two fully equipped Critical Care Cars to support their operations when the helicopters are not operational, for example due to poor weather. In addition, the funds will enable the provision of 22 Public Access Defibrillators to be sited across the county near DAA's various locations, as well as a defibrillator in the two new Critical Care Cars and in all other DAA-owned vehicles.



The Exeter, Devon, based operation has two H135 helicopters [©DAAAT]



CRITICAL VISION TECHNOLOGY

To see, to save and protect

**COMPLETE SOLUTIONS,
SEAMLESS INTEGRATION**



TrakkaCam® TC-300

High performance cost-effective surveillance system, 4-axis gyrostabilised (6-axis passive stabilisation), 6-sensor channel payload, Lightweight/compact single LRU design, ITAR-free



TrakkaMaps® TM-100

Mapping & Recording Video Management System, Multi map views with augmented reality, Integration with open and proprietary user databases, Intuitive control and innovative post-processing



TrakkaBeam® TLX

High performance searchlight with superior beam quality, Lower power draw, Internal multispectral filters, optional new dual EO/IR sensors for full situational awareness

trakkasystems.com



The operation is moving its AW169 based service into the night [©LNAAJ]

LINCS & NOTTS: Since announcing a commitment to provide a 24-hour Helicopter Emergency Medical Service (HEMS), the Lincs & Notts Air Ambulance has responded to many overnight missions.

The region's life-saving air ambulance, which celebrates its 25th anniversary this year, currently operates 365 days a year between the hours of 7am and 7pm, in addition to two or three times per week where the crew are on standby to fly throughout the 24-hour period. Even when the full 24-hour service becomes available the number of 24/7 HEMS in the UK will number only 4 or 5.

By the end of this year, the charity hopes to become an operational 24-hour service seven days a week, where the medical crew will be available to help about 438 additional patients overnight each year.

From this month, the operational days for a 24-hour service will increase to four days per week on systems that the aircraft is now fitted with.

Lincolnshire and Nottinghamshire Air Ambulance have submitted proposals for a new headquarters building near Lincoln. The proposed site would see the charity's head offices built at land near RAF Waddington on A15 Sleaford Road.

Your Mission – Our Business

AIRBORNE
TECHNOLOGIES

Tailor-made police ISR solutions

www.airbornetechnologies.at

Designed for Precision

Under the plans submitted to North Kesteven District Council, the charity would purchase land currently owned by the Ministry of Defence and build a facility to house staff, crew and helicopters in a hangar and a two-storey office building.

Currently, the charity's operations and offices are based separately, with the helicopter based within the security of RAF Waddington while the charity offices are in Bracebridge Heath and Colwick.

The Charity has been awarded £1.8M from the Department of Health and Social Care from the £10M made available in the Autumn Budget for all UK air ambulance charities. Lincs & Notts Air Ambulance was successful in its application and has been awarded £1,818,200.



UNITED STATES

IOWA: In Sioux City the local Med Trans Corporation air ambulance is re-branding from Mercy Air Care to Wings Air Rescue. While their name is changing, they'll still be based in Sioux City, and providing service within 150-mile radius 24 hours a day, 7 days a week.

With the new name comes new, state of the art equipment and a new aircraft. Bell 407 N732MT. The staff remains unchanged, with all ten medical staff and four pilots remaining with the company.

CRIMINALS BEWARE. YOU HAVE MET YOUR MATCH.

Airborne law enforcement missions have evolved. So has our technology.

Threats are evolving. Missions are longer, more complex and need to be executed faster. More is expected of you and your crew each and every time you fly. L3Harris' technology is evolving to meet these threats. Delivering robust performance and ease-of-use, these newly launched mission-critical technologies within WESCAM MX™ airborne systems enables operators to see more, operate easier and analyze with confidence. Evolving threats around the world have met their match.



WYOMING: The Wyoming Department of Health (WDH) is seeking public input on a proposed Medicaid waiver concerning air ambulance services in the state. Residents are being invited to attend public meetings and to comment online.

The proposed waiver would expand Wyoming Medicaid to all residents of the state for air ambulance transportation and thereby to eliminate surprise billing, reduce the average cost of air ambulance flights and increase price transparency for patients and employers.

The proposal would involve the WDH bidding for a selected network of air ambulance providers, to which it would then make periodic flat payments. The providers would then recoup needed revenue for the system from insurance plans and individuals paying for transports.

Ed: If Wyoming thought it was going to be easy, they are having to think again. As I found at Heli-Expo this year the US industry is apparently horrified at any idea that changes their business model. All I did was ask a vendor whether a UK style free at the point of use charity air ambulance was feasible in the USA. You would think I punched him.

After the announcement from Wyoming the media were reporting that air ambulance providers are taking issue with the proposal to eliminate those surprise medical transport bills for the Medicaid sector. The providers say that the proposal would lead to lower reimbursement rates for providers and the closure of air ambulance bases. Instead the air ambulance providers would like to see the state raise the reimbursement rate for the service, rely on more comprehensive data to create a new policy and encourage more insurers to cover their inflated costs.

FIRE

BRAZIL

AMAZON REGION: In a series of highly charged political moves some of the G7 governments have donated around \$22M (£18M) to Brazil to assist with halting the clearance fires in the Amazon Region of Brazil.

Brazilian officials say the government will reject the funding pledged at the G7 summit in Biarritz. Emmanuel Macron for the host French nation announced the aid which was immediate and could be spent on more fire-fighting plane sorties to curb record blazes in the rainforest that have alarmed environmentalists.

Brazil's environment minister had initially welcomed the offer of funds from the G7, as well as a separate £10M pledge from the UK and £9M from Canada.



UNITED STATES

CALIFORNIA: The helicopters that are fully certificated and available in San Diego County for fire-fighting has grown in the last 15 or 20 years from practically nothing to eight now that an additional helicopter will be added to the mix.



In early August the County Board of Supervisors voted unanimously to split the cost of a Blackhawk helicopter with San Diego Gas and Electric. After the agreement is finalized, the helicopter will be positioned in the north part of the county during Red Flag Warning conditions.

Under the agreement SDG&E will cover the costs to operate the helicopter for the first two hours of any new flight, and the County will cover the second two flight hours. If used during a fire, the County could pay a maximum of \$150,000 depending on flight time and reimbursements from the State of California or the federal government.

The County also shares a year-round lease with SDG&E for an Erickson Skycrane helicopter, which was put into action for several 2018 fires including the West Fire in Alpine, the Rangeland Fire in Ramona, the Pasqual Fire and the Recycle Fire in Campo.

The region currently has 10 aircraft available for initial attack:

- A U.S. Forest Service firefighting helicopter during fire season
- Three CAL FIRE fixed-wing aircraft, which consists of two retardants dropping airtankers and an air tactical supervisor plane,
- Three County Sheriff/CAL FIRE helicopters
- Two City of San Diego helicopters
- The SDG&E-leased Erickson Skycrane helicopter.

For an extended attack the County can also call on 26 military helicopters if available. [Fire Aviation]

BMS

VIDEO | DATA SOLUTIONS

REAL-TIME MISSION CONTROL

ULTRA LONG RANGE DATA LINKS

bms-inc.com

The advertisement features a blue and white color scheme with a background image of several helicopters in flight against a sunset sky. In the foreground, the silhouettes of two firefighters are visible. The text is arranged in a clean, modern layout with a mix of white and blue colors.

NORTH CAROLINA: AirLife North Carolina, a division of Air Methods, has opened a new helicopter base at the Lumberton Rescue and Emergency Medical Services, located at 2391 N. Roberts Ave. The helicopter and crew primarily will serve Robeson County, but can respond to emergencies in surrounding counties. Helicopter and crew became operational at the start of August.

The 24/7 service is predicted to undertake 300-360 calls annually with their red, white and grey Airbus Helicopters EC135 N135CJ. The Lumberton base is staffed by twelve crew members comprised four pilots, three flight nurses, three flight paramedics and two mechanics.

The company constructed a crew building and a helicopter hangar on the site alongside existing rescue services accommodations on this city alongside the Interstate 95. The crew accommodation was completed last month but the hangar is still in construction.

There will be an open house this month so members of the community can learn more about the helicopter and the service it provides. [The Robesonian]

SEARCH & RESCUE CANADA

AIR FORCE: The \$1.39-billion, Cormorant Mid-Life Upgrade [CMLU] for Canada's search-and-rescue fleet of CH-149 Cormorant helicopters was announced in mid-August by the Canadian Defence Minister Harjit Sajjan.

The upgrade will allow the service life of the Cormorant helicopters to continue until 2042 and will feature improvements to the airframe, engines, navigation, communication and flight-recorder systems as well as sensor capabilities. The structures of the airframes will be upgraded, and two additional aircraft will also be added to the fleet.

The programme will upgrade the Cormorants to the latest AW101-612 standard, currently being delivered to Norway, providing a low risk upgrade path with a modern, proven solution. These capability enhancements and equipment improvements will include state-of-the-art avionics, a new "glass cockpit", the addition of the latest sensors, radar and search enhancement technology, more powerful digitally-controlled engines, wireless in-cabin communications, LED lighting, rescue hoist upgrades, synthetic training solutions and more.



The Cormorant SAR fleet is set to grow [©Leonardo]

Leonardo, as "Team Cormorant" prime contractor, will work closely with IMP Aerospace and Defence to deliver the work in Canada, with tasks undertaken by Canadians. CAE will deliver Canada's first AW101 full motion simulator and other synthetic training capabilities. GE Canada will provide the new engines and Collins Aerospace will provide the new cockpit displays and avionics. Other Canadian suppliers will be engaged through a robust Industrial Technological Benefits (ITB) and Value Proposition programme to deliver the maximum value of the project to Canada.

Currently the RCAF operates a fleet of fourteen SAR configured Cormorants and has a number of airframes in store that were purchased from the defunct US Presidential Lockheed Martin VH-71 Kestrel programme derived from the same EH-101 model as a source of spares and additional airframes. Nine of those were built.

The Cormorant first entered Canadian service as a search-and-rescue helicopter in 2001. It was selected for its ability to operate in Canada's extreme weather and variety of geographical terrain, from high altitudes such as the Rocky Mountains to extreme temperatures such as the Arctic. The proposed CMLU and fleet expansion will be scheduled for delivery with no interruption or reduction in rotary search and rescue capabilities and will return Canada's primary search and rescue helicopter to service at CFB Trenton. [TC/Leonardo]

UNITED KINGDOM

A recent independent review of the UK Search and Rescue arrangement by British defence company QinetiQ has praised the transition of SARH services to the civil market as “successful”.

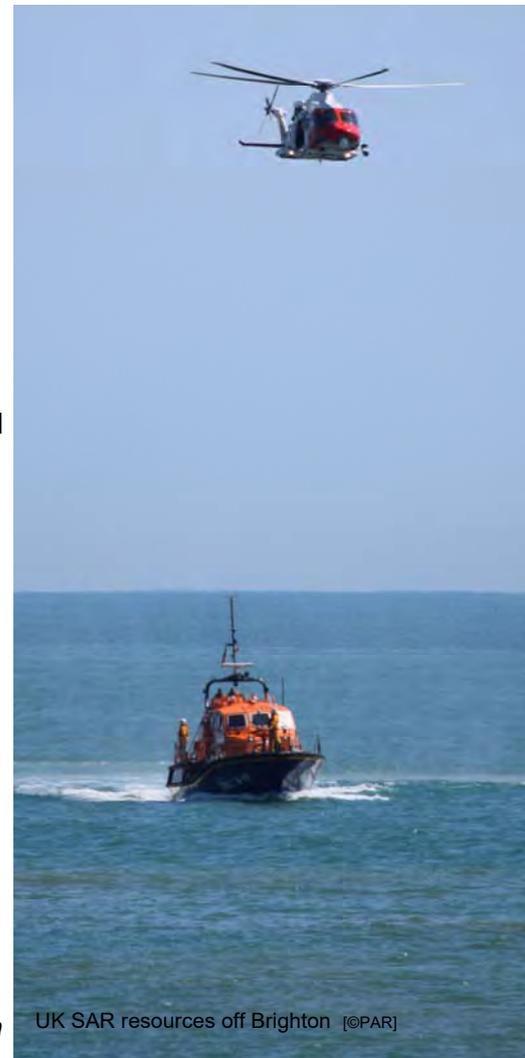
In 2012, the UK Government controversially put the exclusive helicopter operating rights for UK SAR up for auction. CHC and Bristow were the two final bidders for the service, with Bristow eventually securing the £1.6 billion contract to operate all SARH flights over a ten-year period (1 April 2015 – 31 March 2026). CHC now operates the Irish SARH service.

QinetiQ’s study, a twenty-page on-line document prepared in March this year, concludes that the UKSARH Programme has achieved a successful transition to a fully civilianised, rationalised operation with enhanced capability, while providing a seamless SAR service to the UK.

Although the company is under some difficulties and in Chapter 11 Protection Bristow currently operates a fleet of 11 AW189s and the same number of S92s from ten bases in locations required by the Maritime & Coastguard Agency with base utilization and tasking rates across UK SAR operations higher than the legacy service.” [Helicopter Investor] Ed: QinetiQ has more than a passing interest in the subject. The report above can be read online as a download from [SARH](#):

Funded by QinetiQ’s Internal Research and Development, they have a search and rescue development programme exploring how small unmanned air systems, with enhanced information sharing capability can help rescue teams be more effective and save more lives.

In recent demonstrations, QinetiQ arranged for the MCA control room staff in the National Maritime Operations Centre, Fareham, to safely and securely control the sensor of an unmanned system in flight at Llanbedr airfield in North West Wales – over 200 miles away. The live situational awareness feed, which included marked up imagery, search status and reference points, was simultaneously distributed to multiple teams at the search site in Llanbedr, and to remote sites in Fareham, London and Southampton.



UK SAR resources off Brighton [©PAR]



CHOOSE THE **CORRECT** GROUND POWER SOLUTION WITH THE

Powervamp Ground Power Selector Guide

ENTER your aircraft manufacturer and model

> VIEW the **most suitable turbine start unit** and **power supply** for your needs from Powervamp’s extensive, internationally renowned range

IT’S QUICK • IT’S CLEAR • IT’S INFORMED

Decision-making made easy. Go to: www.powervamp.com/product-selector



+44 (0)1934 643000 info@powervamp.com



INDUSTRY

Cobham, currently under scrutiny for a take-over bid, has been selected by the UK Home Office to provide the full Emergency Services Network Aircraft Communications System (ESN ACS) as part of the Emergency Services Mobile Communications Programme (ESMCP), in a contract worth £64M.

The system, a first of its type worldwide, will provide mission critical push-to-talk voice and high-speed data services over LTE for all UK police and air ambulance aircraft with deliveries during 2021-22. Other UK users of Cobham's airborne TETRA may also adopt the system.

Cobham's solution, an evolution of its market-leading RT-7000 tactical radio selected for use by over 20 public safety aviation units worldwide, will simplify installation and ease user adoption by using existing form factors and familiar HMI from Cobham's proven TETRA systems. Cobham will also supply highly sophisticated antennas to operate on both the ESN terrestrial band and dedicated Air to Ground network. As part of the ESN ACS project Cobham has collaborated with QinetiQ to bring world-class test and assurance capability to the team. Together, the two companies will deliver an assured programme for the UK Emergency Services, backed by 10 years of through life support with the option for a further 5 years.

Paul Kahn, Sector President of Cobham Communication & Connectivity said, "This win reinforces Cobham's position as the market leader in critical communications for airborne users. We are proud to offer our continued support to UK emergency services having provided their existing airborne TETRA communications systems since the inception of Airwave. We are excited to be involved in their transition to LTE, enabling new capabilities whilst maintaining the critical voice services upon which our emergency services depend to keep us safe"

With several countries expected to migrate from TETRA-based systems to LTE-based Government communication networks in the near future, Cobham is well placed to help users of airborne TETRA systems in those countries benefit from this capability and experience.

Ed: This is a welcome announcement and Cobham are probably the best people to see it through. That said this is a long way to go and aircraft integration is the worst minefield there is for integration as was found when Lancashire Constabulary first launched the current digital system. The fact that ESN is so late already is a warning sign that it may not go smoothly.

DEA Aviation based at Retford in the UK has taken delivery of a second special mission DA62 from Diamond Aircraft. The aircraft is configured for maritime patrol and includes a high performance EO/IR sensor, a maritime radar and a beyond-line-of-sight satcom system supplied by DEA.

DEA is regarded as a pre-eminent provider of airborne ISR services in Europe and has been expanding rapidly in this field. Business development director Dicky Patounas says: "Working with our long-term friends in Austria has always been a pleasure. We select the right aircraft fitted with the right sensors for our customers and pride ourselves on delivering the best possible service for the best possible value. Our new DA62, and the associated sensor suite, delivers exactly that."

Specialising in airborne ISR, aerial survey and flight inspection and flight calibration services, the company has delivered over 5,000 flying hours of contracted ISR services in both the maritime and land domains.

^[BAN]
Ed: DEA is Europe's biggest MPP operator. I did try and arrange to call by to take a picture of the new arrival last month. Unfortunately, that was not possible – in keeping with their status among surveillance aircraft operators — all of their serviceable fixed-wing resources were out working – undertaking surveillance and securing the borders of Europe. And this for a type that NPAS rejected but trains on.



DEA has a wholly Diamond fleet [©DEA Supplied]



THE COMMERCIAL UAV SHOW

12-13 November
ExCel, London

#UAVshow

Recently, the **UK Civil Aviation Authority (UK CAA)** hosted its' first international lithium battery workshop to explore key issues faced in the safe transport of lithium batteries.

A two-day workshop was attended by over seventy stakeholders from manufacturing, testing, logistics, airline operators, government agencies and aviation regulators. The group discussed lithium batteries and the risk to flight safety and evaluated practical solutions that could see the reduction of non-compliant shipments in air transport. The UK CAA's International Group hosted the workshop, with sponsorship from the UK Government's Department for Transport, Aviation Policy and Strategy, Aviation Strategy and Consumers Division. Keynote speeches and panel discussions included representatives of the International Civil Aviation Organisation (ICAO) and the International Air Transport Association (IATA).

Properly manufactured and tested lithium batteries are very safe. However, their high energy levels present a risk of the battery igniting and exploding if they are not treated with care or have a manufacturing fault.

The key point taken from the workshop was the need for all to work together with regulators and rule makers and for a multi-layered response.

After the workshop, Vincent Desiderio, US Postal Inspection Services said, "It was incredible to see so many different interests represented under the common goal of keeping the public safe". Over the coming weeks, the UK CAA will produce a report of the workshop with the potential action plans for consideration and implementation. The UK CAA hopes that the new collective group can work together and produce an agreed action plan to take forward.

Airbus hosted a ceremony with leaders of the **U.S. Naval Test Pilot School (USNTPS)** to commemorate the UH-72A Lakota's 10th anniversary at Naval Air Station (NAS) Patuxent River, Maryland at the end of July.

Airbus Helicopters established the Lakota program at the USNTPS in July 2009. Over the past ten years, the UH-72A Lakota fleet there has consistently exceeded operational availability targets and continues to provide high levels of mission readiness with availability rates averaging nearly 94%.

The UH-72A Lakota is a version of the highly successful EC145 twin-engine rotorcraft used by U.S. Navy, U.S. Army and many other military units worldwide. Globally, there are 1,345 H145 helicopters in service, amassing over 5.5 million flight hours.

The Airbus H135 has been proposed for the U.S. Navy's Advanced Helicopter Training System (AHTS), soon to be known as the TH-73A.

Today the 675 of the H135 model are used by the U.S.

Army, U.S. Navy, U.S. Coast Guard and the Department of Homeland Security.

The UH-72A Lakota is built in Columbus, Mississippi, the same location where Airbus has manufactured over 555 helicopters for the U.S. Government. This facility employs a workforce of over 40% military veterans, who continue Airbus' 50-year tradition of manufacturing helicopters in the U.S.



Pilots, and where to source them, remains an active subject and one that some organisations are going to great pains to promote and train new pilots for the industry.

Argus International, Inc. has entered a new partnership with CAE that they hope will take a more transparent approach in the way pilots grow and develop. CAE announced targeted partnership with Southwest Airlines, XOJet, JetLinx, and Argus to help develop an alternative aviation career path for pilots.

The aviation industry is currently experiencing a deficit of qualified pilots for charter, regional, and major airline operations. This issue will continue as more pilots retire faster than new pilots reach regulatory experience requirements.

The Destination 225° Program will take a more competency-based approach to training versus a traditional compliance-based approach. The programme will take a closer look at the value of each flight hour and have a more in-depth evaluation of pilot-based competency. Destination 225° will career track pilots going through training with viable job opportunities through the program's partnerships. The industry historically has evaluated a pilot's competency solely based on their total flight time. Argus will look more at what aircraft they received the hours in, missions flown, and details regarding training received. They will look at the specifics of what the training incorporated and factor in elements that expand beyond minimum requirements.

This training is led by enhanced training, safety and operational reporting measures endorsed by Southwest Airlines, XOJet, JetLinx, and Argus. The cadets selected will be screened, assessed, and trained by CAE starting in January 2020. The cadets will begin the FAA Pilot licensing ground school followed by flight training at CAE.

Pilots can accumulate up to 500 hours as flight instructors, then fly with either XOJet or JetLinx for at least 1,000 hours or fly 1,500 hours as flight instructors at CAE Phoenix. The experienced pilots can then apply to Southwest Airlines as a first officer candidate and if selected, will undergo Southwest's rigorous new-hire pilot training at the airline's state-of-the-art facility in Dallas.

CAE state that their input into the project will see them train more than 700 new professional pilots over the next 10 years for Southwest Airlines' Destination 225° program at CAE's aviation academy in Phoenix, Arizona.

Since 2002, CAE has been providing training equipment to Southwest Airlines in Dallas, where it currently operates more than 15 CAE Boeing 737NG full-flight simulators (FFS) including CAE's 7000XR Series and more than 20 CAE flight training devices including, the latest XR Series suite. All devices are equipped with CAE Tropos 6000XR visual system and the latest Boeing 737 MAX FFS is scheduled to be delivered by the end of 2019 at Southwest Airlines' training facility in Dallas.

Next year **PAVCon Europe is in Berlin**. Delegates, speakers and visitors to the event might have expected that the much-delayed Berlin Brandenburg Airport (BER) might have been on-line to ease their journey into Berlin. Unfortunately, it is still not the case. The latest event was that in late July they announced the topping-out ceremony at Terminal 2. Currently officials are saying the facility is on track to open in October next year – eight years behind schedule – and four months after PAVCon!



Construction workers put up a flower display to mark the occasion, which comes 10 months after the start of work on the building. The terminal, called T2, is expected to serve 6M passengers a year and will increase the total capacity of BER to 28-30M. Its topping-out also marks the start of final technical tests leading to the opening of the whole airport.

The airport was supposed to open by the end of 2011 but was delayed several times because of a major redesign to comply with fire protection standards, among other factors. Costs have more than tripled from €2bn to €6.5bn. www.berlin-airport.de

YOUR MISSIONS REIMAGINED

Farnborough International, UK
5-7 November 2019

In partnership with







VERTICAL FLIGHT
EXPO & CONFERENCE

Formerly 

- **New vertical technologies** are about to transform the way we use the skies, driving a new generation of safer, leaner, better VTOL missions.
- **It's a new expo for a new era**, where a passion for flight meets the power of automation. You'll find everything you loved about Helitech International, but with a fresh outlook and a new venue at Farnborough, giving you a bold, multi-dimensional experience designed to **inspire, inform and connect.**

REGISTER NOW

verticalflightexpo.com

@VTOLexpo

Read the latest news at blog.helitechevents.com

At **EAA AirVenture in Oshkosh**, Wisconsin, in late July, GE was showing off a full-size mock-up of the all-new engine entirely 3-D printed. The mock-up shows how parts of the engine case can be made thinner in some areas where stress is lower and how internal channels can be manufactured in from the start, as opposed to more traditional manufacturing, which would grind away material after casting or milling. The dramatic reduction in parts for the production engines means more strength, lighter weight, and fewer parts and vendors in the supply chain, which lowers costs. The result is better fuel efficiency and in theory a longer life for the engines. With 1,100 hours and 900 starts on test engines trials indicate that the engine burns 15% fuel than competitive engines. From launch the engine will be rated at 1,300 shaft horsepower and have a 4,000-hour TBO.

Bell has selected **Precise Flight's** patented Pulselite System® as standard equipment for the Bell 407GX_i.

The Pulselite® System is an FAA certified lightweight electrical system controller that alternately pulses the landing and auxiliary lights of a helicopter, thereby increasing its visibility and reflecting the speed and directional movement of the aircraft. In addition to enhancing the margin of safety by increasing aircraft recognition, the Pulselite® System has been proven to significantly reduce bird strikes.

The Pulselite® System is certified for all major rotorcraft models through the Federal Aviation Administration and was recently granted foreign co-validation from the European Aviation Safety Administration (EASA), the National Civil Aviation Agency of Brazil and the Civil Aviation Administration of China (CAAC) for Bell 407 aircraft.

The **Helicopter Museum** at Weston-super-Mare has issued a Progress Report on its new Entrance Building, which is replacing the original wooden Pratten building structure that was used as the reception, introductory displays, café and shop since the Museum first opened in 1989. The Museum has thus far self-funded the new building, which will contain a new café and toilets, shop, reception and staff offices and a new film theatre/meeting room, as well as refreshed introductory and educational displays, leading




COMMERCIAL
UAV EXPO
AMERICAS

THE WESTGATE RESORT
LAS VEGAS
OCT. 28-30, 2019

**DRONES FOR
PUBLIC SAFETY
& EMERGENCY
SERVICES**

Drones as First Responders
A Force Multiplier
Collision Scene Reconstruction
Disaster Response
Drones in PD's and FD's






Commercial UAV Expo is focused on commercial UAS integration and operation and attracts a global audience of drone professionals. With top-notch education, unparalleled networking and an exhibit floor of best-in-class class drones and systems, it's the one event on the calendar public safety & emergency services professionals shouldn't miss.

Produced by Diversified Communications



Free Report:
How Drones are Being Used in Public Safety & Emergency Services in North America

Download at
expouav.com/news/uav-americas-reports

Use code **SAVE100CB** for \$100 off a Conference Pass!
expouav.com

Visit the exhibits for free!



Many of these stock airframes are now on display [©PAR]

through into the main museum.

Volunteers have begun to prepare exhibits that will be relocated in the new extension, including a rare 1930s Cierva C.30A Autogiro that was discovered in the rafters of a garage near Cirencester more than thirty years ago. The exhibit includes a section of the original fabric bearing the RAF markings and serial number (AP506). Other exhibits will also be relocated into the new extension this coming winter, freeing up space in the main display hangar.

The museum has several genuine police aviation exhibits among its collections including an Italian AgustaBell 206 and early surveillance cameras. www.helicoptermuseum.co.uk.



Early Marconi Heli-Tele from 1974 [©PAR]

Protective and survival equipment specialists, **BCB International Ltd**, based in Cardiff, Wales, celebrated 40 years of the business this summer.

Its equipment currently supports the British military as well as a number of foreign ministries of defence. It has been used in the Falklands, Mali and Afghanistan, among other places. The company, which stemmed from one man's cough syrup has grown to now have over 70 employees across three sites in Wales.

BCB was originally founded in 1854 during the Crimean war, when Dr Brown supplied the troops with Brown's Cough Bottle (BCB). The company was then taken over by a local chemist, Deryck Howell, in 1949. Forty years ago, his son, the current director of the company, decided to embark on international waters and set up BCB International Ltd. www.bcb.in.com

Flightcell International Ltd has won Aviation New Zealand's supreme Company Award. The Company Award recognises the outstanding performance and contribution to the growth of the aviation industry. This follows a similar success in 2016 when Flightcell won Aviation New Zealand's "Excellence in Innovation Award". www.flightcell.com.

Helicentre Aviation Academy and **Bristow Helicopters** have jointly launched the Bristow Cadet Programme designed to create the next generation of Bristow pilots. Four cadets will have their training fully sponsored to enable them to qualify as Commercial Helicopter Pilots. The cadets will also receive sponsorship of their Instrument Rating course enabling them to transition directly from training into employment with Bristow, flying offshore as first officers at one of the company's UK bases. The programme will commence this autumn and will be delivered at Helicentre's Midlands-based training centre.

New helicopter project in the pipeline?

You need **Helimetrics Ltd** to help you manage the maze. From operational requirements to programme management, aircraft acceptance, and warranty supervision

Helimetrics Ltd clients already include government agencies, the police, multi national technology companies and private owner-operators

Helimetrics Limited

Telephone: 01608 642231 E-mail: josmond@helimetrics.com

Website: www.helimetrics.com

PICKING THEM UP *and putting them down again*

ADVERTORIAL FEATURE

It is probably a sign of the times with Europe in some industrial turmoil. Cross border sales are a growing issue and having your suppliers close by often pays dividends.

It is said that Airbus Helicopters are turning their back on the UK designed and manufactured TLC Helilift in favour of a more complex and costly German product. In truth both products have been offered for a long time by MBB/Eurocopter/Airbus but on a regional basis, the new strategy is a corporate decision based in Germany. And perhaps there is a Brexit connection.

Decades ago, when the present Airbus Helicopters was a company comprised of many parts; their UK Eurocopter agent was McAlpine Helicopters based at Kidlington Airport, Oxford.

In the early 1990s McAlpine were approached by a small Yorkshire engineering company, **TLC Handling Ltd.** The CEO Tony Hancock was promoting a then unique design of ground-handling equipment for skid-mounted helicopters. McAlpine worked closely with TLC to produce what is now a patented design. They were so impressed that they eventually bought three for their own use.

At around £30,000 each they were terrific value for money and were international machines that called upon the best components in the market – the prime mechanical elements were sourced in Germany and that continues.

The TLC has a patented system of picking up skid landing gear helicopters from the outside using arms that project from the control and battery box. That patent means that the competitors are obliged to produce systems that pick up from below and in most instances that produces a more compact vehicle but one that produces its own difficulties with ground clearance for wheels and an ability to travel on anything but a level surface.



The basic 'one size fits all' TLC Helilift is comfortable with most skid mounted helicopters and now costs less to buy than when it was launched two decades ago. [©PAR]

SAME TASK DIFFERENT METHOD

The different lifting systems each have their drawbacks. The development of role equipment provides particular problems for centre lift machines in that the belly of the airframes have aerials, lights and sensors protruding downward and in danger of crushing. All models have to space their lifting clamps to avoid equipment—including downlink aerials and skid mounted ditching and pontoon gear. The fixing points of emergency floats tend to be fairly flexible and can present particular difficulties.

In the early days McAlpine undertook the lion's share of marketing for the Helilift. A coup for the tiny engineering company was when the unique item of ground equipment itself became a selling tool for the campaign for selling and leasing the then new Eurocopter EC135 series as a police helicopter. Eventually the usual package deal was a helicopter delivered with a "free" Helilift.

The marketing ploy was so successful that McAlpine's prime commercial rivals Police Aviation Services at Staverton were also offering the Helilift with their leases and sales. Clearly these deals were not really free gifts, but the price of the equipment allowed the companies flexibility leaving the overall winners as TLC Handling. The appearance of the helicopter mover in so many high-profile UK police aviation locations was attractive to many up and coming international air units. Sales were good and over 500 units are out there.

In time McAlpine was absorbed within Airbus Helicopters but the favourable atmosphere between the manufacturer and TLC Handling lingered on. As late as 2017 the unique links between the two were being heavily promoted in independent reports.

The numerous sales of skid equipped helicopters to the various UK police aviation units and air ambulance market peaked in the late 1990s. The longevity of the Helilift tended to mean that UK repeat business was limited, a matter exacerbated by the 2012 creation of NPAS with its attendant reduction in bases and airframes. NPAS had too many Helilift's for its needs but, fortunately, there remained a ready market

Variety: The simple tractor drawn pad remains a favourite in the USA. Selling landing pads at major US shows is greatly complicated by unions insisting that helicopters cannot be put on them! The simpler option includes the Chopper Spotter but they are load restricted.



Hillsborough FL [©PAR]



for used examples.

Airbus Helicopters may have maintained its favour of TLC in the UK but naturally in homeland Germany its main marketing effort was directed at a German machine that was more complex and significantly more expensive. It did the job but was less nimble. The primary main home market customer was the Bundespolizei and they were naturally inclined towards the wholly German Wackerbauer.

Moving skid landing gear helicopters is big business and a range of solutions are available. Seen to be the cheapest by far are detachable wheels but with larger helicopters they are often heavy and fiddly to attach and can require the effort of several people to handle them.

A simple landing trolley – a towable metal framed landing pads on wheels can offer the possibility of moving a heavy aircraft by a single person. These can be cheap, rustic and often home-made and not always well engineered, stress tested or maintained – and that is regularly demonstrated by flight safety ‘incidents.’ They do provide a cost-effective solution as long as the pilot lands the machine on them well.

The next stage up is the fully engineered self-propelled commercially manufactured landing pad. Although good they can tend to be expensive – anything from \$25,000 upwards.

STRAIGHT AND LEVEL

All of these movers have a major flaw in that each landing pad can only move and park a single airframe, clearly having several aircraft in a fleet can be very costly. They also often need a relatively flat surface to work efficiently.

Most helicopter lifting options need a good surface and fortunately most landing grounds are flat, but many systems face difficulties including how to traverse awkward raised door runners into hangars. They are indeed a major problem which some manufacturers seek to brush off and suggest that temporary metal ramps are brought into use. The carriage of such additional aids is hardly conducive to true flexibility of operation.

Another issue is the speed of transportation. Most options offer transport at walking pace, the operator walks with the unit as it trundles along holding a control unit attached by an umbilical cable or radio link.

Radio links have led to some major problems if the manufacturer has not provided a totally fool-proof pairing system.

There have been several instances where an operator has been holding an incorrect controller and trying to bring to life an apparently unresponsive unit they are standing by. Meanwhile, out of sight a second machine to which the controller is actually paired is smashing around a hangar space causing damage. The worst reported incident affected six helicopters.

Working at walking pace is fine for small areas but it has limitations. Many military operators need to spot their aircraft significant distances from the hangars and simply moving them at walking pace is challenging in terms of time. The dedicated towed landing pad can overcome many of these speed issues but only if the load is stable and secure. Most self powered solutions are relatively slow, moving helicopters faster and if possible, remotely is a niche market option that the industry has not yet successfully met.

Tony Hancock at TLC Handling sought to address the speed issue when he designed a ride on Helilift more than eight years ago. At the final Helitech in Duxford (2011) TLC launched the new ride on model and showed that it could travel at speed when handled by a competent operator.

The model was also exploring another niche sector in being able to move sideways to enable tighter parking in hangar spaces. A common feature of the existing lifting devices is an inability to offer all axis movement, although the self propelled pads off that.

The redesigned TLC model is still around and under development but not in production. Potential customers were of the opinion that having the machine operated by anyone other than a trained expert would be dangerous.

#



Helimo inside lift design in Bolivia [©www]



Seen here at Helitech ExCel the Mototock is full of German engineering but is complex and prefers flat ground [©PAR]



Still in development. The new 2011 TLC Helilift offered the operator a ride-along seat and faster travel [©PAR]

GETTING THE RIGHT PRICE

Some of the more complex ground handling machines are costly [around £60,000] restricted in their capabilities and sell only in low numbers. That leaves the current market leaders, the Tiger-Tug and the TLC, to slog it out for individual sales.

Partly because it offers a range of sizes to suit the customer the newer Tiger-Tug produced in Bend, Oregon currently has an edge on price but the £27,500 TLC, unique as an 'one size fits all' outside lifter, now costs less than it did when it was launched 25 years ago!



Tiger-Tug [©Tiger]



NEW DIRECTION

But that is not yet the complete story. Increasingly the emergency services helicopter industry has been moving away from skid landing gear and embracing wheeled craft. As a result there is a growing need something more than a simple tow bar and tractor. Operators are looking for sophisticated front lift tugs that are not simply downsized business jet and airliner solutions.

Mototok Germany

Dallas Avionics, Inc., are to distribute the Freedom line of communications test equipment from Astronics. The new agreement makes Dallas Avionics an authorized distributor of the entire Freedom line for the U.S. Federal Government market.

The Freedom line of products includes the R8100, R8000, R8600, and R9000. Both the R8000 and R8100 support every major Land Mobile Radio (LMR) protocol. They are capable of testing P25 Phase 1 and Phase 2 radios.

ACCIDENTS & INCIDENTS

24 December 2018 Airbus Helicopters H145 N. Air ambulance of Mayo Clinic, Rochester, Minnesota. Crew was responding to a scene call in Strum, Wisconsin. The crew decided to land at an alternate landing zone in front of the fire station instead of a pre-established landing area approximately one mile away. The approach was made utilizing Night Vision Goggles. The pilot stopped his approach just prior to touchdown (3 feet above ground) to avoid an unreported obstacle at the leading edge of the landing zone. The tail rotor then made contact with the top of a fire truck parked to block the street at one end of the landing zone. The pilot lost tail rotor control and the aircraft nose spun to the right. The pilot immediately lowered the collective and impacted the ground. The aircraft rotated approximately 225 degrees before coming to a complete stop. The pilot performed an emergency shut down and the crew exited the aircraft once the rotor blades stopped. There were no serious injuries to the crew or bystanders.

This event occurred on Christmas Eve and during the US government shutdown, follow up interaction with the NTSB and the FAA delayed the investigation of the event. [Concern]

27 April 2019 Airbus Helicopters H125 N. Air ambulance of LifeLine operated under the REACH Program. During a patient transport from Loveland, Colorado to Denver, Colorado, there was a conflict incident with a fixed wing aircraft five miles south of Loveland. The medical crew was providing patient care and their eyes were inside the aircraft. The airplane was to the left (east) of the helicopter which was turning erratically and unpredictably in every direction. The plane showed up on TCAS and the pilot let the medical crew know that there was traffic that needed their attention. The pilot called out position and heading calls several times with no response from the fixed wing. The fixed wing then turned towards the LifeLine helicopter and continued straight at it. The pilot was obliged to take evasive action by banking and then lowering height. The flight continued without further incident, but the other aircraft was never identified. [Concern]

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

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

24 June 2019 Airbus Helicopters H145 N. Air ambulance of Boston MedFlight. Whilst taking a patient from Martha's Vineyard, an island off the coast of Massachusetts, to Boston it is alleged that the single pilot fell asleep though fatigue and overflew the landing area. There were no injuries and the patient were successfully transported. The pilot no longer works for the company. [Media]

3 August 2019 Robinson R44 DQ-HPT Air ambulance medevac mission being operated by helicopter of Parker Equipment Hire based in Savusavu with three persons on board, a pilot, young child and mother, crashed in Natewa Bay, Fiji. The flight was operating from Naitaba Island to Labasa Hospital. [Media]

15 August 2018 Airbus Helicopters H145. G-????? Air ambulance of the East Anglian Air Ambulance. Two people were slightly injured when a length of wooden fence was blown over by helicopter down-draught at Forest Glade, Haverhill, Suffolk. [Media]

16 August 2019 Bell 206B3 JetRanger N106PD Omaha Police Department. The helicopter crashed while attempting to land at the Blair Municipal Airport and losing power. The aircraft ended up on its left side with the tail boom and rotor detached and main rotor damaged. Police identified the pilots as Matt Baughman and Brian Yaghoutfam. According to the flight plan the helicopter was scheduled to be flying over Omaha for about an hour before heading back to the Blair airport where the unit recently moved. [Media]
Ed: This is the second incident this year. In April a unit OH-58 was damaged. This leaves them with a single Bell in service.

18 August 2019 Helicopter [possibly Bell 206L]. Air ambulance operated as MedStar based at Bay Minette, Alabama had to make an emergency landing south of Bay Minette. [WKRG]

20 August 2019 Bell 407 PT-YZF "2" Policia Rodoviaria Federal, Brazil. Aircraft was substantially damaged at Eunapolis, Bashia when undertaking a landing in a car park alongside a highway during a surveillance mission. While manoeuvring the MRBs struck a structure and the Bell dropped around 10-15 feet. The airframe was upright with the skids collapsed, the tail boom severed and MRB damaged. The three persons aboard survived. [Media]

20 August 2019 Airbus Helicopters AS350 ZS-RWX. South African Police Air Service. Landed alongside a runway at Virginia Airport, Durban, in KwaZulu-Natal and turned over on its side during a training sortie. No one was injured in the incident [News 24]



FACING YOUR NEXT
HELICOPTER DECISION ?

AEROPTIMO
MANAGEMENT & ADVISORY

WWW.AEROPTIMO.COM INFO@AEROPTIMO.COM +44 (0) 1628 879 884

21 August 2019 Airbus Helicopters AS350 VT-HDX. Heritage Aviation. A helicopter involved in relief efforts in flood-hit Uttarkashi district crashed and erupted in flames after it got entangled in the overhead electricity wires, killing the three people on board. [Media/ASN]

23 August 2019 Bell 407 VT-SVK Aryan Aviation Pvt Ltd., The private helicopter made an upright landing on the steep rock and debris strewn slope of a riverbank at Lagwada whilst transiting to Chiwa to distribute relief material in the rain-hit Uttarkashi district of Uttarakhand. Both pilot and co-pilot of the helicopter were safe and escaped with minor injuries but there was significant damage to the helicopter. [Media/ASN]

SAFETY

Preliminary investigation of an AW119 accident identified disassembled connection between the yaw control input lever and the rotating input shaft, partial presence of spalling on inner races. This was highlighted by an EASA AD No.: 2019-0194-E TE.CAP.00111-009 © European Union Aviation Safety Agency. The investigation to determine the root cause of these occurrences is in progress. This condition, if not detected and corrected, could lead to functional failure of the TR pitch change mechanism, resulting in loss of control of the helicopter. As a precautionary measure and pending further information from the technical investigation in progress, Leonardo S.p.A. issued the EASB, providing inspection instructions and improved installation procedures applicable to TR duplex bearing. The AD requires inspection of the TR pitch change mechanism, installation of additional locking wire and repetitive inspections of the affected duplex bearing and, depending on findings, corrective actions. This AD is considered an interim action. [CAA]

UNMANNED

The Maritime Safety Directorate of the Ministry of Sea, Transport and Infrastructure of the Republic of Croatia issued the first mobilization request to the European Maritime Safety Agency (EMSA) for CAMCOP-TER S-100 maritime surveillance services.

The S-100 will assist in a range of maritime Coast Guard functions including SAR and a range of surveillance missions. It will be based on the island of Brac from where it will carry out regular patrol flights. The operation is not exclusive to Croatia; EMSA awarded the multi-year maritime surveillance contract to Schiebel in November 2018 on the basis that the manufacturer will provide simultaneous maritime surveillance services to several European Union (EU) member states and EU bodies.

The S-100 is equipped with an L3Harris Wescam MX-10 EO/IR camera gimbal, an Overwatch Imaging PT-8 Oceanwatch payload and an Automatic Identification System (AIS) receiver.

DroneShield Ltd has a breakthrough new product, RfZero™, following extensive development in response to end-user feedback. The product is now available for purchase.

RfZero™ is an omnidirectional drone detection device with a 1km range. It is designed to be a cost-effective fixed site alternative to DroneShield's higher end product, RfOne™ (a 5km radiofrequency direction finder). As such, RfZero™ responds to the needs of users with more substantial budgetary constraints. As is the case with the rest of DroneShield's fixed site product family, RfZero™ uses DroneShield-Complete™, DroneShield's proprietary counter drone software user interface. It is also able to integrate with the rest of the fixed site DroneShield product suite, such as DroneCannon™ for either automated or manual drone defeat, once RfZero™ detects the drone.

RfZero™ is completely non-emitting, thus allowing for a substantially larger customer universe. Given that the product thus lacks this regulatory constraint, and is marketed at a lower price point, the product is expected to be of a substantial appeal to a wide array of customers.

It is not a new concept by any stretch of the imagination, but it has just been 'reinvented' for the United States Air Force – turning an existing written down asset into a cheap Drone. Eight years ago, the military were converting older, former front line, aircraft into such pilotless craft and firing guns and missiles at them as targets. The potential difference is that now they can use them as a low-cost airborne surveillance asset.

The United States Air Force has recently succeeded in flying and landing a 1968 Cessna 206 without having anybody on board. The United States Air Force Research Laboratory (ARFL) along with DZYNE Technologies Incorporated have completed a two-hour first flight using a Robotic Pilot Unmanned Conversion Programme called ROBOPilot.

ROBOPilot is pretty much what the name implies; a robotic pilot. By removing the pilot's seat in the Cess-



na 206 and installing a robotic device that operates the aircraft's controls similar to how a human pilot would, the Air Force has managed to easily convert the 50-year-old Cessna into a UAV. AFRL's, Center for Rapid Innovation, has partnered with US based DZYNE Technologies to produce the kit. ROBOpilot controls the stick, pushes on brakes and rudders, controls the throttle, flips switches, and can read the aircraft's avionics. In addition, the system utilises GPS and an Inertial Measurement Unit for increased situational awareness and flight data. The system then uses this data to make decisions as to how to best fly the aircraft.

ROBOpilot offers the military [and everyone else of course] the benefits of going on unmanned operations without having to deal with the costs and complexities of developing new unmanned aircraft and vehicles. <https://i-hls.com/archives/94131>

Ed: All therefore more confusing that over in the UK the slightly differently spelled ROBOPILOT relates to a ground vehicle that will combine inputs from sensors around the vehicle – radars, cameras, ultrasonics and lidars to work with a mapping system artificial intelligence and data to have the same effect in 2D.

The UK programme is a consortium of Arrival Automotive, UPS UK, Thales UK, Loughborough University, University of Bristol (BRL), University of West of England (BRL), South Gloucestershire Council, Test and Verification Solutions and AXA UK.

In the civil arena both these projects will ultimately require a fool proof sense and avoid system that the certification authorities will sign off. After the recent Boeing 737MAX FAA certification debacle I can see that someone will be checking and rechecking their conclusions.



PEOPLE

Universal Avionics (UA), announces that Mr. Hervé Rousselle has been appointed to the position of Regional Sales Manager for Europe. Based out of Lyon, France, Hervé is responsible for UA's product sales and overall market growth in France, Luxemburg, Italy, Belgium, and French-speaking areas of Switzerland.

"UA continues to expand our product line and grow our presence in Europe," said Robert Clare. "The addition of Hervé to the Sales team will greatly support our increasing sales coverage in this growing market," he added.

Hervé brings over 20 years of business and general aviation sales experience to UA. Prior to joining UA, Hervé held various sales positions at GE Aviation, Parker Hannifin Corporation, and Dover Corporation. He holds a Bachelor's in Marketing degree and is a private pilot, owning a night pilot private license as well as an aerobatic pilot license.

Mr. Christian Zumkeller will continue to cover UA's sales in all of the other European countries as well as the Middle East and Africa.

To contact Hervé, visit www.uasc.com/sales.

The Schiebel Group have announced expansion of its U.S. subsidiary, Schiebel Aircraft, Inc., with the appointment of Gretchen West as President and CEO to facilitate the growth of its Camcopter® S-100 UAS in the United States with a focus on the US defence, civil and commercial markets.

Most recently, Gretchen served as a senior director in the Global Unmanned Aircraft Systems (UAS) practice group at leading law firm Hogan Lovells focusing on drone policy initiatives and strategies for commercial drone market expansion. She also serves as an Executive Director of the Commercial Drone Alliance, an independent non-profit, where she advocates on behalf of the commercial drone industry for a stronger and expanded policy and regulatory environment for UAS integration. Prior to those roles, Gretchen served as Executive Vice President at AUVSI where she oversaw the association's advocacy, business development, and strategy efforts.

www.policeaviationnews.com



LETTERS

Belmont
Durham
DH1 2BD

28 August 2019

Dear Sir,

Anyone who has had an association with the BN Islander, an icon of British aircraft manufacture, will understand why, after more than 50 years of continuous service this aeroplane with its boxy fuselage, high wing and fixed landing gear is still unbeaten as a multi-role light utility aircraft. The BN Islander, not to be confused with the larger BN Defender 4000, is a rugged, agile 10 seat aircraft with a list of roles that's only limited by the ingenuity of the operator; light transport, air ambulance, maritime patrol, aerial survey, photo-reconnaissance, parachuting, security duties, and police air support, to name but a few!



Most recently the Falkland Islands Government Air Service (FIGAS) has ordered a further 2 Islanders to add to its existing fleet of 4 aircraft for inter-island transport and maritime patrol. Meanwhile the choice of engines, currently the Lycoming O-540 260 hp, the IO-540 300 hp and Rolls Royce 250 turbo-prop is to be increased with the addition of the Lycoming iE2 with FADEC single lever control rated at up to 375 hp. This new engine will increase the maximum take-off weight from 6,600 lbs to 7,700 lbs, as well as increasing the aircraft's cruising speed. One of the long term operators of the turbo-prop BN-2T Islander is the British Army and the Royal Air

Force. These aircraft, now in military service for some 30 years, are to be upgraded with Garmin avionics, crash survivable cockpit voice recorders and multi-purpose flight data recorders. Another 20 years of exemplary service would not be out of the question.

Sadly, this British success story also highlights the debacle of the aeroplane ordered by the National Police Air Service, the Vulcanair P68R. This 6-seat aircraft, described by its Italian manufacturer as an aircraft suitable for private transport and multi-engine pilot training, was first ordered by NPAS, as a demonstrator, in 2013. Now, some 6 years later, 4 aircraft languish in a hangar at Doncaster awaiting '*airworthiness and police operational certification*'. One must now question the logic of ordering an unproven aircraft which, at the time, was not certified for flight in known icing conditions and which, according to the manufacturer, has a maximum take-off weight (MTOW) of just 4,548 lbs and a maximum landing weight of 4,321 lbs. By comparison, the MTOW and the landing weight of the BN Islander is 6,600 lbs.

Is this difference between the take-off weight and the landing weight of particular significance? Yes, unfortunately, the P68R has no means of dumping fuel, to reduce weight, should a mission be cancelled after the aircraft gets airborne. Moreover, according to the independent report by Her Majesty's Inspector of Constabulary, '*Planes, drones and helicopters*', published in November 2017, cancelling a request for police air support, once the aircraft is airborne, is not uncommon with, according to the report, a cancellation rate of 43%. A difference of 227 lbs may not sound much. However, at a nominal fuel consumption of 20 USG/120 lbs of Avgas per hour this difference in the 2 weights, between take-off and landing, means that the aircraft cannot land for almost 2 hours after getting airborne! This, in turn, places a very big question mark over the decision by NPAS to purchase the Vulcanair P68R in favour of the tried and tested British BN Islander. This is a question to which the public, the taxpayers, deserves an answer,

Yours sincerely,

James A Cowan MBE

Note: The author, a former RAF pilot, has previously flown the BN Islander with police North East Air Support Unit and with the Scottish Air Ambulance Service.



MOVE ALONG THERE

It seems that the Drone police in Northamptonshire have been thinking. Always a dangerous development.

On the local BBC TV News, in Eastern England, Sgt Sam Dobbs, of Northamptonshire Police has been extolling the virtues of a drone to combat sheep rustling at night! The sheep show up well on the thermal imager, when the drone is overhead the flock!!

No explanation was given on how the plod were going to select a particular flock of sheep to observe for 8 hours, 16 batteries, day in day out, waiting for the rustlers to turn up. Or how they themselves were going to appear invisible to the rustlers when they need line of sight visibility of their own drone at night.

Well at least we now know what to do with the 20,000 extra police persons Prime Minister Boris Johnson has promised! Were you misquoted Sam?

Official statistics say that there are around 23 million sheep and lambs in the UK but there are no statistic that say which of the thousands of flocks will be targeted on a given night. The Drone Police will have their work cut out.

PC Victoria Atherton qualified as Derbyshire Constabulary's first female drone pilot early last month. The officer is now a fully-fledged member of the Force's UAV (unmanned aerial vehicle) division after passing her flight assessment during a specialist drone operator training course run by Heliguy.

She came to notice when Derbyshire Police were dealing with a major evacuation of a small town called Whaley Bridge when it was threatened by a crumbling dam. The drones were used for security patrols. It is said that her relationship with aviation has been 'turbulent' and led to her successfully fighting a gender discrimination case against a fixed wing flying school along the way. Amy Johnson and Amelia Earhart probably faced similar problems in the past.

PC Atherton is in the minority. A survey published towards the end of last year revealed that just 5% of UAV pilots are women. It's a common trend, with the numbers across the aerospace industry generally low but rising. Something should be done about it I guess.

But we should have seen the inexcusably focussed interest in the female drone operator coming. When the priceless Paris Notre Dam church was on fire the most publicised image wasn't of the blaze itself; but of a female drone pilot at the scene.

Next?

It is not the first time a woman has complained that they have been thwarted from taking part in aviation, and it will not be the last. The cause is not always assisted when senior police officers appear in public wearing an inappropriate look that denigrates the Office of Constable.

There were howls of protest from the public when Deputy Chief Constable Rachell Swann appeared on camera to speak on serious subjects relating to the Whaley Bridge dam incident sporting an inappropriate hairstyle. Many never heard her message as they were distracted by her punk style bleached hair. All she had to do is wear a hat. After all that is the uniform requirement of all ranks in the police service when outdoors.

In the dim distant past policewomen were banned, on good health and safety grounds, from having long hair or ponytails on police duty. The hair was supposed to be stuffed safely under a hat that might also serve as an impact defender. As many young women in the past learned to their cost, persons of a criminal inclination grab long hair to great effect.

If nothing else a police hat, cap or helmet is an identifier that sets the individual aside from being mistaken for a chauffeur, ticket inspector or, dare I suggest, a member of a punk band. Now, regardless of gender, police seem to shun the authority and relative safety afforded by their hats and helmets on a daily basis. In this instance I guess Ms Swann might have saved herself from the wrath and ridicule of most of the critics simply by being properly dressed.



As previously mentioned, – with monotonous regularity - getting good staff to stay in the job is a big balancing act of pay and conditions.

One of the high-profile women Tactical Flight Officers with NPAS at Wakefield was Claire Garner, she has a second life playing Women's Rugby to International level. Recently Keighley Cougars Women signed her from Bradford Bulls. The profile of rugby and police crew looked good for all concerned. She only began playing rugby league in 2016 but impressed enough with Bulls to earn an England squad spot in last year's World Cup in Australia. News is that she has resigned from NPAS.

Over London there is a new project tie-up between helicopter-hire specialist Charter-A Ltd and fast food delivery specialist Deliveroo. They have launched what is marketed as Europe's highest restaurant – the Roocopter dining experience.



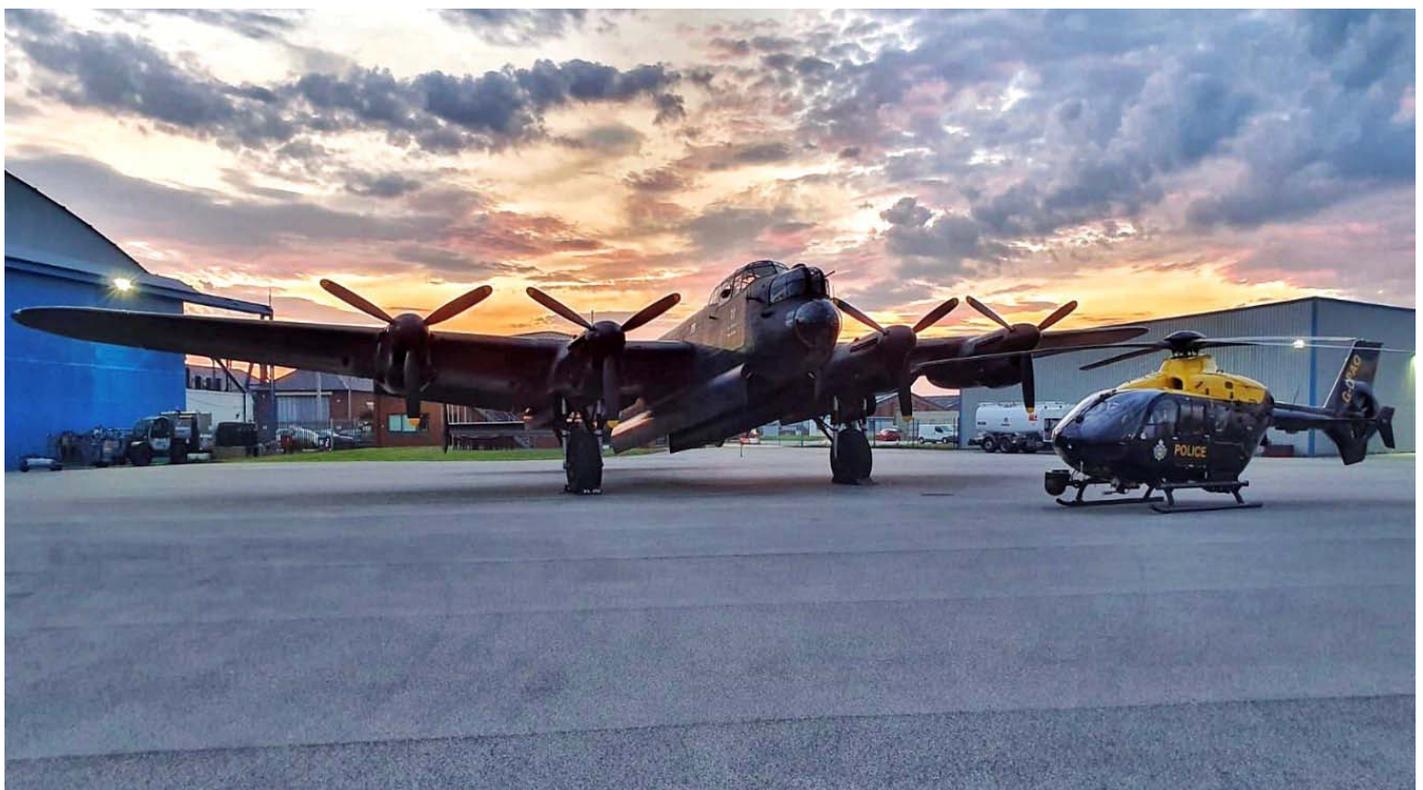
Charter-A Ltd is providing and piloting the Leonardo AW109 [a 2006 Agusta A109S G-REXC] helicopter, flown in Deliveroo's teal branding as Roocopter One. It is the capital's hottest new dining experience at 1,000 feet. The first day of operational flights in the Agusta sold out with 48 passengers 'enjoying' breakfast, lunch and dinner from eateries including Five Guys, Wagamama, Chipotle, BabaBoom and Joe Public. The potential downside of the experience is that no-one has yet explained how to interface the undoubted enjoyment of a 20-minute flight over the sights of London with truly enjoying the consumption of a fast food meal in the same timescale. Perhaps the trick is to eat the food at leisure in the lounge before you fly?

As if there is not enough emergency services news to be had on a monthly basis, on August 18 Grimsby Today re-ran an identical story in their publication. The July edition of PAN [page 6] ran the story of how they had suddenly discovered that Doncaster was not doing a great deal for police air support. Then it appeared again, apparently word for word, two months later! The piece included the detail that Grimsby MP Melanie Onn has raised the decline in air service support in Parliament and is seeking a debate. Well clearly 60 days later that has not come to pass! [Grimsby Live/Grimsby Telegraph]

Summer days! Time to sit in the garden and watch world of aviation go by. And of course to look out and see what is happening out of the nearby NPAS base Lippitts Hill. The skies are busy around Waltham Abbey, what with the Lambourne Stack for Heathrow, the departure route from London City, the Lea Valley Helicopter Route into London and the VFR navigation following the M25 Motorway there is a lot passing. I still await a fly-by of an NPAS P68 of course but occasionally a locally based [fixed undercarriage] private P68 gives me a taste of the future. All I can say is the either the local P68 is particularly noisy—perhaps it needs its engines tweaking—or we might be expecting many noise complaints when NPAS start circling your location at night.



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



Enough of the never ending NPAS fixed wing story and get to a bit of nostalgia when the NPAS Hawarden EC135 (G-CPAO) met up with PA474 the only flying Avro Lancaster bomber in the UK in late August. [©NPAS Hawarden]

COMING SOON

18-19 September 2019 The Emergency Services Show at the NEC Birmingham. The Emergency Services Show is the UK's leading annual showcase of the blue light sector, featuring over 450 exhibitors, live demonstrations, unique learning opportunities and unrivalled networking.

Taking place in Hall 5 at the NEC in Birmingham, the two-day event brings together all disciplines from the emergency services sector to discover innovative technology and operational solutions, share their experiences and unite in their collaborative approach to public safety. <https://www.emergencyuk.com/>

21-23 October 2019 The 5th OFSEC - Oman Fire, Safety and Security Exhibition, Oman Convention and Exhibition Centre, Muscat - Sultanate of Oman. OFSEC EXPO 2019 is designed to meet the needs of the local, regional and international markets by linking practitioners, suppliers, distributors and manufacturers from the fire, safety and security industry, with key decision makers from the government and private sectors. www.muscat-expo.com/ofsec

28-30 October 2019 Commercial UAV Expo Americas, Las Vegas, Nevada, USA The Vegas event defines and showcases the global commercial UAV industry, with a special focus on solutions in the Americas region. It has shown consistent growth for 4 straight years, with 2,400 attendees this past year and a record 175 exhibiting companies. Strictly commercial by choice, it draws the power buyers and global influencers and sets the pace for the industry, with innovative formats, cutting-edge content, and unmatched excitement on the expo floor. It is a must-attend event and will convene 3,000+ delegates and 200+ exhibitors from 6 continents. Diversified Communications technology group +1.978.371.1792 phone / +1.978.590.9164 mobile www.expouav.com

4-6 November 2019 Association of Air Medical Services [AAMS] Annual Conference and Exposition. Atlanta Georgia. www.aams.org

START STRONG

REGISTRATION OPENS FALL 2019 AT HELIEXPO.ROTOR.ORG

SAVE THE DATE

HELICOPTERS • EDUCATION • NETWORKING

Jan. 27-30 • Anaheim, CA
Anaheim Convention Center
Exhibits Open Jan. 28-30

