

Police Aviation News

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Issue 289

May 2020

Stay at home lifters

Production is severely hit but
Industry is producing paper planes

The COVID-19 Effect

The emergency services adjust

Business as Usual For Some

Disquiet over Drone Spies

Changes in the rules worry some

The Ever Empty Diary

EDITORIAL

In the UK, HEMS capable air ambulances may well become an endangered species in the coming weeks. Already there are signs that some of the charity financed operations are cutting back or repurposing their operations. The problem is that health authorities have been withdrawing doctors and paramedics from the front line of air ambulances.

The first to ground their operation (Devon) announced that it was because of difficulties in achieving a safe distance between the crew members and the second (Yorkshire) because their medical staff had returned to front line duties in hospitals. Others declared stoically that they would continue to provide a meaningful seamless service offering the full HEMS mission profile. There is a public persona to feed and for some any sign that they cannot put the iconic aircraft in the sky is a sign of weakness that might further damage depleted fundraising.

For most the truth lies somewhere in the middle. Few air ambulance charities can afford to directly employ their own doctors and paramedics to fill a full time need, others have a mix of contracted and volunteers. It is estimated that financing a full service could cost a charity at least £1M a year so the majority choose not to.

Already there are signs that some air ambulances are moving to provide inter-facility transfers of patients or the air delivery of urgent parts and medical supplies. Others are deploying their medical staff to fly in larger military helicopters where they are less in contact with the patient. The inter-facility sortie was always an optional service but now it comes to the fore there are potential issues with the confines of typical HEMS cabins. Such pro-active missions do not require valuable medical staff to sit around all day waiting for an incident that may never happen when they could be working in a hospital hard pressed by treating the Corona virus.

With lock-down a feature of almost every country massive change in practice abound. Who could have predicted in January that sectors of the aerospace and motor industry would shut normal production down to work together to produce medical ventilators and for the fashion industry to be making shapeless medical clothing?

Bryn Elliott

LAW ENFORCEMENT

ITALY

STATE POLICE: You might think that as Italy was one of the more severely affected COVID-19 countries that its people would take on the true severity of the pandemic. Not so it seems. Helicopters belonging to the Italian Police, Armed Forces and Armed Corps are regularly involved in COVID-19 patrol missions: when they spot suspect gatherings of people possibly breaching social distancing regulations and being out for no authorised reason, they direct ground teams to intercept them. Videos emerging over recent weeks have shown Police helicopters flying low over the beaches of Southern Italy kicking up a stinging sandstorm to drive away people sunbathing contrary to the nationwide lockdown.



One of the more serious incidents occurred in Palermo, Sicily, on Easter Sunday, April 12.

COVER: The Kent, Surrey and Sussex Air Ambulance crew leaving their Leonardo AW169. ©KSSAA

Air ambulances across the world have been faced with new challenges in operations and financing. At a time when all charity operations are seeing their face-to-face funding lifblood blocked by lockdown they are having to speak to their fund-givers almost exclusively through the Internet. Lockdown has reduced flights to trauma incidents but increased the need for funding anti-Covid measures and flying. Even non-charity EMS operations have been seeking relief from governments to keep their operations available.

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A Leonardo AW139 of the Polizia di Stato (Italian State Police), was flying a routine patrol mission when the crew spotted a group who had gathered on the rooftop of a building for an Easter Sunday BBQ. As the helicopter approached the block, fireworks were set off on the roof forcing the police to remain at safe distance before going away. The scene, that several media have called “a reckless show of defiance”, was filmed from the helicopter as well as by neighbours. Videos subsequently posted on YouTube and on news websites, include scenes filmed by those who were taking part in the BBQ on the roof of an apartment block. The Mayor of Palermo has reportedly declared that “These people are nothing but idiots. We will track them down and they will face the full force of the law.” (The Aviationist)



Ed: Fireworks being considered a hazard to aircraft are subject to a specific NOTAM (Notice to Airmen) advertising the location and effective period, so that pilots can avoid the area. The ones being let off on the roof in Palermo appear to have been more smoke than substance so the ‘full force of the law’ may well be more related to COVIC-19 regulations. Either way the residents vacated their rooftop eyrie and Bar-B-Q before street police made their way onto the rooftop sometime later.



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SWITZERLAND

ARMY: The Airbus Helicopters EC 635 helicopter model primarily used by the Swiss Army for training, ambulance and police missions has been repurposed by RUAG to add a spatial separation of the cockpit from the cabin to protect pilots from any COVID-19 patients aircraft may need to transport.

Additional work includes incorporating a suitable method for disinfecting the entire helicopter and ensuring that the H135 based machine can fit the different medical devices required by Coronavirus patients have to be use – along with designing out any interference-generating signals [EMC].

Two helicopters have already been repurposed and are ready for use by the Air Force. RUAG MRO Switzerland has also ensured that the necessary production mechanisms are in place for the short-term modification of further EC 635-type helicopters. Close collaboration between RUAG MRO Switzerland and its partners, armasuisse and the Air Force, has ensured it has been possible to create solutions available within a very short time frame. [RUAG]

Ed: These aircraft are military examples of the H135 and undertake civil roles on demand. Police role conversion includes substituting the plain doors for ones marked 'Police.'

UNITED KINGDOM

NPAS: A temporary mortuary has been erected on the south side of Birmingham Airport to help cope with the predicted increase in deaths during the COVID-19 outbreak has already begun storing bodies despite not being finished yet. The facility at No 2 Hangar is close to the temporary Nightingale Hospital being set up at the National Exhibition Centre but is expected to store bodies from across the West Midlands if the situation deteriorates.



Three new white marquee structures were erected in the first week of April. They are close to a large hangar located at the airport's commercial and freight cargo handling area (No2 Hangar) and behind the smaller NPAS Birmingham hangar.



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And part of the site - which will initially have space for 1,500 bodies - has already being used for storage as regional mortuaries reach capacity. It was expected that the whole facility would be fully operational by mid-April. Ominously, it is understood it could expand to accommodate up to 12,000 bodies. [Sky.com]

Ed: The facility surrounds the NPAS hangar, with a tented tunnel between the reception tents and main hangar that runs behind the NPAS base. Crews at NPAS have been consulted – mainly to ascertain whether they have underlying health issues that might put them at risk of being co-located with a few thousand COVID-19 dead. I understand that a few expressed reservations but now it looks like the bosses have reverted to the standard police hierarchy adage of “if you do not like it leave.”

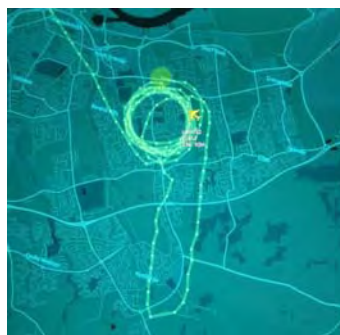
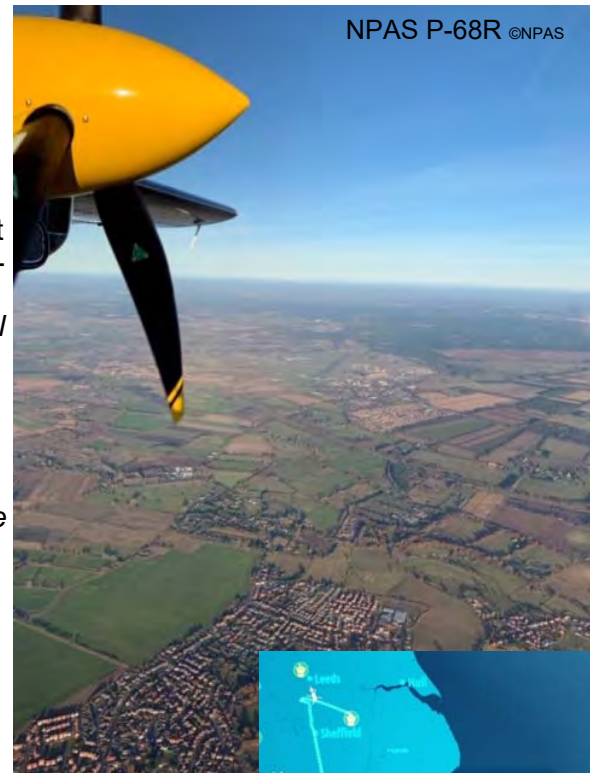
So far the expected high death toll has been avoided and the neighbouring temporary hospital has not been bought into use—a positive factor that might still fragment.

If the situation were to deteriorate there are probably other options including relocation to an alternative base with ‘cleaner’ air, but they are not currently being acted upon. The NPAS Safety and Risk post holder (a non-aviator) does not apparently have concerns. Disquiet reigns as ever and two Birmingham TFOs have recently returned to force over other safety related matters, so staffing is, as ever under strain. TFOs cost a great deal of money to equip and train and the longer they stay the more valuable they become.

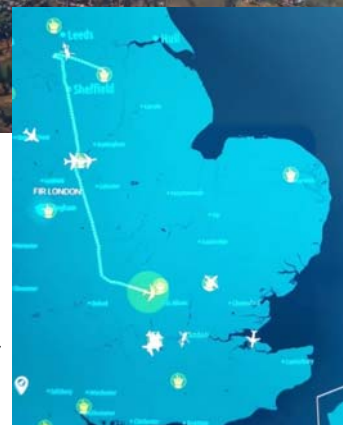
In SPIFR aircraft, now potentially with ageing pilots, the TFOs need to be on unit long enough to receive additional skills to get the aircraft home if the pilot were to become incapacitated. If these valuable crew members are being continuously ‘refreshed’ the operation will never get to receive such safety trained personnel.

The good news is that the fixed wing aircraft are making their mark with the public. When there are ever fewer aircraft in the sky all of a sudden greater interest is taken about anything that flies. As a result, the local populace and Social Media and therefore the local newspapers have been latching on to every nuance every noise and every circling aircraft – especially if they are ‘new’ and blue and yellow. Currently the fixed wing is still working up as they await a full complement of pilots with the required skills to offer a 24/7 all-weather service.

Ed: Being stuck down south 200 miles away from the unit is no real disadvantage to knowledge. Web based information apps clearly show the usual hours of business of the new NPAS resource, where they go, what they do as they zig-zag across the country from one call to another, right up until the time they finally alight at Doncaster and go to bed for the night. Observing the sorties of P68s flying out of Doncaster it is clear that the specification is close to that portrayed to me in 2017. At that time, they stated ‘six hours’ and normal sorties now appear to be just over 4 hours to which should be added the 45-minute diversion reserves.



The public overview of NPAS activity leads to its own troubles with those on Social Media guessing about missions. In one such instance there were suggestions that a police plane circling Teesside was there to detect people breaking “lockdown” rules. The P68R operated by NPAS, was seen flying over



Teesside on the first Sunday in April, prompting the social media speculation. NPAS were driven to confirm it was in the area to help Cleveland Police with a search.



North Weald may well be shut for normal flying but it remains a busy place. In between supporting the NPAS, Air Ambulance, Coast Guard and Military Helicopters on NHS support missions, the the airfield team have been changing the face of the airfield with cutting and preparing the Grass runway for the hoped for summer season and introducing a new grass taxiway in between the NPAS hangar and the main runway.

North Weald ©EFDC

UNITED STATES

FEDERAL: Early in April the Department of Justice announced that it is making \$850M available to help public safety agencies respond to the challenges posed by the outbreak of COVID-19. The Coronavirus Emergency Supplemental Funding program, authorized by the recent stimulus legislation signed by President Trump, will allow eligible state, local, and tribal governments to apply immediately for these critical funds. The department is moving quickly to make awards, with the goal of having funds available for draw-down within days of the award.

The offer by the Bureau of Justice Assistance will remain open for at least 60 days and be extended as necessary. Funds may be used to hire personnel, pay overtime costs, cover protective equipment and supplies, address correctional inmates' medical needs and defray expenses related to the distribution of resources to hard-hit areas, among other activities. Grant funds may be applied retroactively to Jan. 20, 2020, subject to federal supplanting rules.

CALIFORNIA: Alameda County Sheriff's Dept, which covers an area to the north of San Francisco Bay around Oakland is to purchase its first helicopter. The police role equipped Bell 505 JetRanger X \$2,942,609 and it will join an existing fleet of fixed wing aircraft and drones.

The purchase of the nearly \$3M role-equipped Bell was approved by the Alameda County Board of Supervisors last fall and a deposit of a little over \$404,000 approved.

The role fit includes a Wescam MX-10, Churchill ARS700, Garmin radar altimeter and comms, Macro-Blue 12.1inch monitor, NVG compatible lighting, Spectrolab SX-7 Starburst searchlight and a pair of AEM sky shouting speakers.

The Chief Pilot of the unit will be Deputy Rick Hassna, a retired police lieutenant and former chief pilot for Oakland Police Department. He is no stranger to rotorcraft, when he first started flying helicopters three decades ago, onboard navigation meant a map book in his lap. He is an authority in the use of small drones and helped Alameda County Sheriff's Office create one of the largest and most effective law enforcement drone teams in the world.

In December, Hassna was awarded an Attorney General's Award for Distinguished Service in Policing in Washington, D.C., recognizing his innovative use of drones for public safety operations.

Hassna envisions eventually coordinating with Oakland Police and the East Bay Regional Parks District to provide blanket helicopter coverage to the area north of San Francisco Bay. The three are talking about a mutual aid concept where one of the agencies could dispatch a helicopter within minutes to anywhere in the county when called upon.

The Sheriff's Office hopes to house the helicopter at Livermore's municipal airport, LVK, along with its two Cessna 206 airplanes. It is on a waiting list for large hangar space and currently keeps one of the airplanes in a small hangar at the airport. The drone program is operated out of other space leased at the airport.

The aircraft will not be arriving until the summer, Hassna is scheduled to go to the Bell Training Academy in Fort Worth for a week of training in June, before heading to the Bell Customization Facility at Piney Flats, Tennessee in July, where the Canadian-built helicopter was sent for completion. Alameda County will be among the first law enforcement agencies in the state to acquire a Jet Ranger X, following the police departments in Sacramento and Stockton last year. It is the first to purchase the type delivered with the Bell factory role fit.

Ed: Alameda has a long, if fragmented, history of helicopter use. In 1995-96 they were approached and asked to join the proposed Concord Police Regional ASU but rejected it (and that OH-58 based project never came to fruition). In 1996-7 they joined with Contra Costa in a joint 25 hours per week lease of a Helicopter Adventures Inc. Bell 407 from May 1997. That arrangement, STARR 1, lasted for two years and supplemented their light fixed wing Cessna.

Shortly afterwards, on January 1, 2000, Alameda County entered then into a \$75,000 contract with East Bay Regional Parks Police to provide rotary air support for them. This was mainly conducted in the week-end evenings using the AS350B2 with an East Bay pilot and Alameda Deputy as the TFO. One of the five TFOs assigned, Deputy Bob Brock, has the unenviable status of being the TFO when the engine failed on March 17, 2001 and the pilot Bill Proberts got them both down 'shaken and stirred' but safely in a front garden. Later that year contract expired and as far as we know Alameda has stayed with light fixed wing singles since.

INDIANA: Thanks to Jon Goldin a long standing sworn APSA member we have a story to underline that new is not always best. Indianapolis City Police was set up on a new Bell 206A N3399 in 1968, 52 years ago. Over the years they operated other helicopters including some Hughes 269s, but the main patrol and response machine was that Bell.

In mid-September 2001 the Indianapolis City Council passed the city's budget that included a deposit for a newer MD600N police helicopter costing \$2.1M. It arrived in July 2003 registered as N500PD and swelled the number of airframes to four. It appears likely that the mistake they made was to not ask existing operators of the type about their experience. The US Border Patrol had quickly divested themselves of the type and it was a similar position with three sheriff's units in California. Indianapolis found themselves to be the only "Police" dept. to fly an MD600.

The new helicopter was well equipped with a 38 million candlepower Spectrolab SX-16 Nightsun searchlight, a FLIR 7500 Infrared and colour video camera with a recording facility, an Aero Computers LE-3000C Moving Map, Wulfsberg RT-5000 and a MECA 800MHz radios, and a downlink system for the camera. This is the first aircraft in the Indianapolis airspace to utilise COFDM. The strategic plan for the unit was to add additional pilots and observers and to replace the Jet Ranger with another MD600N. The unit is also exploring the acquisition of a twin-engine aircraft for rescue and tactical missions.

In February 2010 the unit was grounded after it was assessed that the police helicopters had cost the city and taxpayers big bucks – up to \$900,000 a year - and were no longer sustainable. By 2010 the city could not even pay for them to be insured. The four aircraft were in storage when it was decided to sell the MD600N and use the money to at least get the Bell flying again. In 2011 the sales were planned.

Today, ten years later, the money the MD made has resulted in Indianapolis retaining air support – albeit with that same 52 years old Bell 206A. It does have a searchlight and FLIR camera, but it is probably the oldest civil helicopter in US police service. [JG/PAR]





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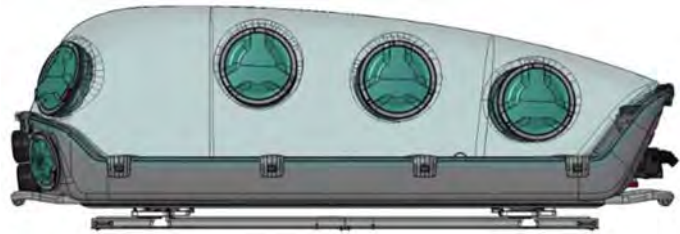
AIR AMBULANCE INTERNATIONAL

March and April have been the coming out of the expensive, large and ungainly EPI-Shuttle. They may tick all the excessive boxes, but they are effectively the only product that the industry can get hold of. The EU backed project to produce these Norwegian designed isolation capsules is a headline grabber. The price is significant, last month they were being quoted at €47,000 each for a batch of ten, this month one price being quoted is £500,000 for eight – although the latter may well include the lease of the aircraft being used. If no-one knows what an EPI Shuttle is by the end of this edition of PAN, they never will.

There are alternative systems, but they tend to be far less sophisticated or simply unavailable. In normal times Ferno offer a simpler and significantly less costly pressurised plastic tube that fits in smaller airframes than the EPI Shuttle, but production has halted because all the filters that go with it have been snatched up in the USA.

Everything is about supply and demand and speed of both decision making and supply - there have been several instances of important stocks of personal protection equipment (PPE) being headed off at the pass. Tales of 3M face masks made in China for the US 3M company being claimed for the US market despite already being bought by Europe are only part of the story. A purchase of 30,000 body bags destined for Europe also went missing when the manufacturer in China decided to take a higher bid despite the bags having already been sold. Which country was expecting to need that many? It is a matter of life, death and ever soaring prices to purchase and then to transport. No-one is taking prisoners.

Still, at a time when almost everything is negative, we have empty roads and skies - everywhere pollution is down. Even China. Last summer, as I drove from Omaha, Nebraska to Chicago I commented to my wife how rare it was to see a sky so clear of aircraft and contrails. Outside my office window today in a usually contrail filled sky the same applies. Be careful what you wish for?



AUSTRALIA

NEW SOUTH WALES: Pel-Air Aviation based at Sydney Kingsford Smith has ordered five medevac-configured Beech King Air 350s ahead of its 10-year-contract to operate for the New South Wales Ambulance starting in January 2022.



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Deliveries of the aircraft are scheduled to commence during the course of 2020 and run through 2021. The turbine twins will be based out of Kingsford Smith Airport and will replace older King Air 200s and 350s currently used by the NSW Ambulance.

Pel-Air will configure its King Airs for multi-stretcher operations and an aft cargo door with heavyweight options for additional performance capabilities.

A wholly owned subsidiary of Rex-Regional Express of Wagga Wagga, Pel-Air already operates four King Air 200Cs on its medevac operations in Victoria under a contract valid through 2023. [Textron]

CANADA

ORNGE: As COVID-19 sweeps across Ontario, the province's air ambulance service is rapidly boosting its capacity to transport critically sick patients and vital medical supplies during the pandemic.

The air ambulance service — ORNGE — is preparing to transport hundreds of sick patients with the virus, many requiring ventilators and specialised care, from across Canada's second-largest province, an area covering more than one million square kilometres.

Its transport vehicles, staffed by critical care paramedics, are particularly important for Ontario's rural and remote regions and many Indigenous communities that don't have the same medical resources as urban hospitals. Doctors in those regions warn that just one or two very sick patients with COVID-19 will overwhelm small hospitals and clinics, many of which have few or no ventilators.

GERMANY

NORTH SEA: Northern HeliCopter GmbH based at Emden Airport in north Germany has won a contract to provide rescue services for the Riffgat and Alpha Ventus offshore wind farms off the German North Sea coast. Northern will carry out HEMS for offshore personnel in connection with the operation of the projects. The contract includes both the flying and the medical components, as well as a rescue control centre for coordinating the rescue operations.

Northern has been engaged in ambulance and intensive care transport by helicopter for more than 25 years. Since 2008 their head office has been in Emden.

As part of the DRF Luftrettung air ambulance network Northern took over the ambulance helicopter service from the East Frisian Islands to the mainland in October 2008 and carries out more than 900 patient transports per year.



Riffgat comprises 30 Siemens SWT-3.6-120 turbines located 15km to the north-west of the island of Borkum. The 108MW offshore wind farm was built by EWE in 2013. Alpha Ventus features six Senvion and six Adwen 5MW turbines. The 60MW wind farm started generating power in August 2009 and was fully commissioned in April 2010.

INDIA

While some are despairing how the local state government can afford to waste money in hiring commercial helicopters to undertake roles in the Coronavirus outbreak others are pushing the government to seize the moment and make use of helicopters now lying idle from their usual role as business tools.

Mathrubhumi, a newspaper published in Kerala has taken issue when the state government, already hard-pressed funding health services for the COVID-19, spent 15 million rupees [£158,000] on helicopter hire.

Last month India was one among few nations in the world to order a total lockdown of 21 days – that start in late March. Inter-state borders were closed, roads emptied of all but the essential and emergency services. Airports closed, flying down to a trickle, mainly airline overflights of the country by other nations.

Indian airports were closed to international and domestic flights except those of the military and cargo carriers until mid-April. On the face of it the situation presents a unique opportunity for helicopters to operate and yet they continue to face severe restrictions due to air traffic congestion and regulatory overloads. In the wake of the virus most of those civil aviation barriers are down. Military helicopters are deployed only on core operational tasks, standing-by for Humanitarian Assistance and Disaster Relief (HADR) requests from civil authorities.

In a country of 1.3 billion there are less than 200 civil helicopters in the civil segment and only about 40 in the private category, 15 with the Para Military and 25 with state governments, and PSUs make up the rest in a total less than 300 civil helicopters in the whole country. Indian military has another 700-odd helicopter. Take away highly specialised combat helicopters and those under servicing and maintenance that leaves only about 300 usable transports at any one time.

In India, the population is around of 1.3 billion of whom more than 70% live in villages. The remaining 30% live in urban areas, mostly living in very close quarters to each other, and are served by 75% of the doctors so there are major health provision inequalities. State run health services are unlikely to know the full extent of the pandemic in rural areas but equally there are reports of them not knowing a great deal about the masses living in urban areas either.

Until now almost 25% of current helicopter operations have taken place in Himachal Pradesh and Jammu and Kashmir but the rotors have stopped spinning. The tourism market is all but dead. Helicopter are a vital resource that can be tapped, adding much value for both sides but the numbers of people that know the product are low.

It is not only educated people from India that are disturbed by scenes of police ineptitude and brutality – beating the people they are supposed to serve with long canes. In contrast there are others that behave well but they are less obvious to the casual viewer.

There are pressures from within India for all those grounded helicopters to be serving the people more, be that as rudimentary air ambulances or as basic airborne law enforcement providing the officers on the ground with back-up. There is no sign of the national or state governments grasping the possibilities.

The sudden lockdown announced by Prime Minister Modi on 24 March, saw a negative reaction by the people as they released thousands of migrant workers from their employment, the hourly paid and the jobless went onto the streets without cover or sustenance. They tried to make their way to their homelands, but the state borders were already closed to them. The knee jerk government decision caught everyone by surprise.

Part of the reason that helicopters have not featured is that India faces the same problems every other COVID-19 affected state faces – the massive shortage of Personal Protective Equipment (PPE) and of course the absence of a plan.

The hospitals need masses of PPE and hand sanitiser and they are not going to let any of the precious commodity go to an unproven and barely understood start up air element. PPE for flight and ground crew, procedures to disinfect / sanitise helicopters, flight controls, cockpits, and separate crew from passengers (with suitable screens or partitions), are time and equipment consuming.

Commentators in India are pointing out that the plans that were in place before COVID-19 were just as flawed in India as they were elsewhere. The Indian armed forces are expected to operate under nuclear, biological, chemical (NBC) threat, but they have nothing in the cupboard and more than half the nations in the rest of the world. Like everyone else the supplies – when and if they arrive - are to come from China or Vietnam and if they were cheap last year, they are not cheap anymore. They sell to the highest bidder.

Unfortunate though the message remains to be understood by distracted politicians that even without PPE, helicopters can take up the slack of non-COVID tasks thereby offloading agencies battling the crisis.

(Capt KP Sanjeev Kumar www.kaypius.com). [The Quint]

On April 17 an Indian Air Force (IAF) Chetak Helicopter flying from Hindon to Chandigarh carrying COVID-19 samples made a precautionary landing on the side of a highway 3 miles outside of Hindon after developing a technical fault. The flight was only delayed a short time.

IRELAND

CORK: Even as the [virtual] ink was drying on the last edition news came in that the Irish Community Rapid Response Air charity air ambulance based in the south of Ireland at Cork had closed down for an indefinite time.

The grounding of Ireland's first charity air ambulance service was blamed on the COVID-19 pandemic halting fundraising activities and it was claimed it will cost lives. The decision took effect from April 3 after the charity had flown more than 350 missions in the seven months since it was launched in September 2019.

The Cork-based service aimed to respond to 500 calls per year and bring a rural population of 10,000 square miles south of Galway and Dublin to within 20 minutes of critical medical attention. Its Agusta helicopter was operating in conjunction with the Athlone-based Emergency Aeromedical Service (EAS).

It was dependent on €2M in charitable fundraising each year but failed to reach that target and had implemented harsh cost cutting measures in an effort to continue. Non-essential staff had been laid off and the hours of other staff cut to reduce the service to just five-days a week. It was not enough.

Ed: The Pandemic may be taking the blame but this whole enterprise was deeply flawed from the start and not greatly helped by overstretching itself in service to the public. It was flying well beyond its means and not raising enough money well before the Pandemic came along.

Other means of finance may well be found by the government to resurrect the service after the emergency period passes.

The Irish Government has ordered a new Air Corps plane to help the HSE during the COVID-19 crisis. The €4.2M aircraft arrived in Ireland at the start of April and will immediately be pressed into service to transport vital medical equipment and patients.

The Pilatus PC-12 single-engine turboprop aircraft is the first of a fleet purchased from Switzerland. The Department of Defence had already ordered three similar planes, which are due to arrive later this year. Although air ambulance missions are part of their normal role, they are in IAC service to undertake surveillance and intelligence gathering.

NEW ZEALAND

HEMS: The many emergency helicopter services that rely on public donations say COVID-19 is going to leave them millions of dollars out of pocket. Like all of their kind they have had to scrap their annual appeals and are therefore seeking money from other sources.



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New Zealand has been more successful than most in the effectiveness of their severe social lockdown, but the lifesaving moves came just as the country's 15 rescue helicopter trusts were about to appeal for public donations.

Westpac NZ is donating an extra \$1M to support New Zealand's rescue helicopters. The money will not go far, a typical recipient the Bay of Plenty coastal region's TECT Rescue Helicopter, will receive just over \$30,000. Westpac has been sponsoring rescue helicopters in New Zealand for nearly 40 years and the Westpac Annual Chopper Appeal is a source of funding that is relied upon to provide this lifesaving service.

While crews have had a drop in the number of rescue jobs while people are in lockdown - it's brought extra expenses like sourcing, providing and using personal protective equipment (PPE).

St John Ambulance has cancelled their annual Heart of Gold appeal and say their projected deficit has grown by more than \$10M - and that's just since lockdown began.

NORWAY

As revealed in last month's edition the military in Norway are at the forefront of the transportation of COVID-19 patients.

They are mainly involved in the safe transportation of patients and their primary tool is the locally produced EpiShuttle litter. The majority of this design of infectious patient transport are too large to fit in the air ambulance aircraft operated within Norway [Beech 200 and H135]. As a result, the military are using their larger airframes to move the patients.

330 Squadron Royal Norwegian Airforce is a 24/7 search-and-rescue helicopter unit that operates from five permanent search-and-rescue bases across the country. It flew 1,461 missions in 2019. The squadron operates ten Sikorsky SH-3 Sea King helicopters a type that is due to be retired in favour of the Leonardo AW101 SAR helicopter.

Another unit involved in the Coronavirus missions is 339 Squadron flying Bell 412 helicopters. They have supported the health service in northern Norway since 2018.

The Air Force were concerned about using the helicopters to carry Coronavirus patients in its Sea Kings but the availability of the expensive but now very sought after EpiShuttle has allayed many of those worries. Trials with the equipment only came in mid-March when a 339 Squadron Bell 412 flew to a hospital to test whether or not an EpiShuttle would fit in the cabin. It did and the unit became assigned to COVID-19 transfers.

The Sea King was not formally tested for carrying the equipment, one night there was a requirement for a sick patient and the trial installation, and the mission were all rolled into one with a nighttime mission from Bodø.

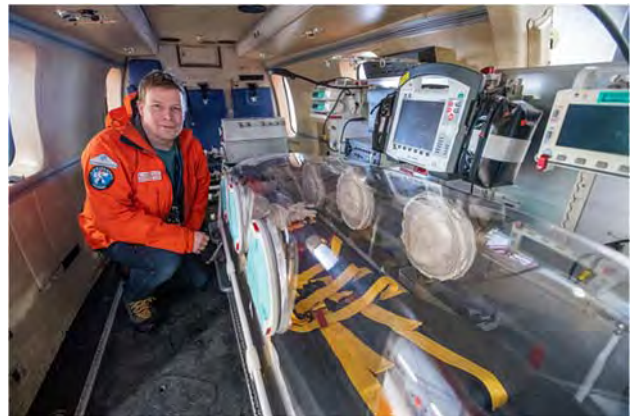
Both 339 Squadron and 330 Squadron are now capable of safely executing air ambulance and SAR missions without the risk of exposing aircraft crew members.

As mentioned last month, the difficulties of getting the substantial EpiShuttle into the Babcock supplied Norwegian Air Ambulance Services Beech King Air aircraft led to the sourcing of alternative airframes – the near instant military solution mentioned above and the commercial option that led to the leasing of an Airbus Helicopters Super Puma from helicopter operator Luftransport.



The King Air aircraft were selected because they could safely operate into short field runways in the north of Norway but the outsize load need brought about by the hygiene implications surrounding the COVID 19 patients has meant that with the winter weather continuing, helicopters are the easiest solution.

Lufttransport had an AS332 L1 Super Puma undergoing overhaul at the Stavanger facility of Heli One. This former Icelandic Coast Guard helicopter already had an EMS interior which set it apart from other options. It was not fully dismantled, but it did need a lot of work doing to have the Air Ambulance Technology interior and the EPiShuttle installed, tested and certified. It took just nine days from the initial request to delivery to Tromsø where it serves to fly remotely located patients to the University Hospital of Northern Norway. Two Lufttransport pilots, and one technician operate the aircraft with typically one doctor and two paramedics from the hospital looking after the patient.



SWEDEN

AIR AMBULANCE: Notwithstanding the difficulties found in Norway with the same type, Babcock’s team at Scandinavian Air Ambulance have refitted one of their Beech 200 aircraft into a dedicated COVID-19 air ambulance to help relieve intensive care departments in Sweden.

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The Beech 200 aircraft has had an internal re-fit to better accommodate COVID-19 patients and all staff have been given updated training to assist in the transportation of these patients. This aircraft has become the first choice when transporting COVID-19 patients however our seven other fixed wing aircraft and ten helicopters can also transport these patients and have had additional protection measures added.

UNITED KINGDOM

NATIONAL: Royal Air Force Puma helicopters are being used to help with "medical transports", as well as the movement of personnel and equipment. In a similar aid to the civil power Royal Navy helicopters are to be used as air ambulances for the NHS during the COVID-19 pandemic.

Three Merlin anti-submarine helicopters from RNAS Culdrose in Cornwall and their crews from 820 Naval Air Squadron have been set aside for the task. The aircraft will also be used as transporters, moving both supplies and personnel. They will be supported by engineers and technicians as well as medics, air traffic controllers, safety and logistic experts at the Helston air base. Equipment has been stripped out of cabins so each Merlin can carry several stretchers, passengers and stores quickly and efficiently over long distances.

Efforts are being made to protect air crew from the risk of infection. The Navy said medical guidelines will be followed for isolating patients, as well as decontaminating helicopters, equipment and uniforms. Air and ground crews will work 12-hour shifts as part of the response to the pandemic, as well as carrying NHS paramedics with patients when required.

Three British Army AW159 Wildcat helicopters [right] have been deployed to support the UK Ministry of Defence's efforts. The Army Air Corps' helicopters will be operating out of RNAS Yeovilton and will look to cover the South of England alongside Royal Air Force Chinook and Puma helicopters from RAF Odiham and RAF Benson.



Leonardo Wildcat

NATIONAL: Air BP, the aviation division of BP, provided free jet fuel for use by the helicopters of four UK charity air ambulance services, supporting their life-saving work during the current coronavirus pandemic, during April.

The four are organisations that BP already supplies with jet fuel; Great Western Air Ambulance Charity, based at Almondsbury, Gloucestershire; Midlands Air Ambulance Charity with bases at Strensham, Shropshire and Cosford, Worcestershire; Wales Air Ambulance Charity at Dafen, Carmarthenshire and Yorkshire Air Ambulance at Topcliffe, North Yorkshire and Nostell Priory, West Yorkshire.

Yorkshire and Great Western receive fuel directly from Air BP. Wales Air Ambulance and Midlands Air Ambulance Charity are supplied by Air BP customer Babcock International.

Later in April Total UK Limited announced that it was to supply free jet fuel to both the Essex & Herts Air Ambulance Trust (EHAAT) and the Great North Air Ambulance Service (GNAAS) during the pandemic to ensure that both services are able to continue carrying out life-saving work.

The donation from Total will initially cover each air ambulance service's jet fuel requirements for one month but this will be reviewed during the pandemic and extended as required. Total UK has existing relationships with both air ambulance services. Working with the EHAAT since 2018 providing jet fuel directly

to the Earls Colne Airfield as well as indirectly at North Weald Airfield.

It has also been working with GNAAS since October 2019, offering advice on the service's fuel farms, fuel tanks, capacity and delivery lead times. The jet fuel donation from Total UK will be the first delivery into its new facility at Urlay Nook, Eaglescliffe.

Cliff Gale, Operations Director at EHAAT, said: "Essex & Herts Air Ambulance are delighted to be a beneficiary of a tank of free fuel from Total. The charity is continuing to provide its 24/7 life-saving care to the people and communities of Essex, Hertfordshire and surrounding areas during the pandemic." [Total]

CHANNEL ISLANDS: A charity is hoping to run an emergency helicopter to get critically ill islanders directly to UK hospitals within an hour. Air Rescue Channel Islands (ARCI) was set up by Andrew Scott-Miller, a coastguard with extensive experience in the charity sector, and Mark Birrell, a full-time firefighter with previous helicopter winch experience over a year ago.

Despite both Jersey and Guernsey having fixed wing air ambulance aeroplanes which provide medical transfers, the charity says there has been a significant increase in the use of UK Coastguard helicopters across the islands, around 30 each year.

The proposed Channel Islands HEMS will operate a service to the islands of Alderney, Herm, Sark, Jethou and Brecqhou where there are limited medical facilities on island. The medical team will land at pre risk assessed and agreed landing sites, supporting the on-scene medical staff and transfer the patient to either Jersey, Guernsey or in rare occasions directly to the UK.

Invitations to tender have been sent to five UK operators, with the intention that a six-month trial would commence later this year under the call sign HELIMED 96. In the light of this trial a five-year contract may follow. Having looked at the Leonardo AW169, MD902, AW109, Airbus H135 and H145 the team have a shortlist of the 169 and 145 although that does not discount the others.

The operator of the helicopter is likely to be one of the two largest providers of air ambulances in the UK, with extensive experience operating at night and in challenging conditions. Prior to the outbreak of the Corona virus ARCI had hoped to have a helicopter based on the islands by the Summer. As well as providing medevacs, ARCI could carry out multiple roles for a range of Emergency Services, such as repatriating islanders who have had extensive procedures in the UK to remove the difficulty of travelling through airports with oxygen cylinders or limbs in plaster. Further future roles include search and rescue at sea, assisting Police with missing person searches and an ability to fight fires from the air.

To undertake the expected 400 sorties each year the charity now needs to raise £1.5M to get the service in the air, and will also be looking for volunteers to carry out roles such as in-flight medics, off airfield landing safety teams in each island and various operational roles within the running of the charity. [Jersey Evening Post]

CORNWALL: The new Cornwall Air Ambulance AW169 helicopter G-CRWL went into service on April 1. The new state-of-the-art helicopter was funded over a two-year period by a now closed "New Heli Appeal," that aimed to raise £2.5M but actually achieved £2.8M.

The new helicopter offers the air ambulance medical crews a great deal more space than the MD902 the unit had used previously. The AW169 offers 360-degree access to the patient with a stretcher down the middle, whereas in the MD they can only treat them from one side.



Despite the ongoing Coronavirus outbreak, the charity continues to operate its lifesaving service, ensuring that those in urgent need of care receive the best possible chance of survival.

Paula Martin, Chief Executive of Cornwall Air Ambulance, said: "We have taken active steps, in accordance with government and NHS guidelines to ensure that the service the crew provides remains intact. In today's climate dominated by Coronavirus headlines, the fact that the new helicopter is ready to take flight is some positive news. As a charity, our focus will always remain on providing the best possible service to the people of Cornwall and the new helicopter marks a new era in the level of care the crew can provide."

As the current outbreak makes fundraising challenging, the charity is calling for support now more than ever to help keep the helicopter flying in these difficult times.

DEVON: Devon Air Ambulance will temporarily be responding to patients solely by critical care car, but its critical care paramedics will still be able to respond to patients with their specialist skills and equipment. The unit operates two owned EC135T2 helicopters and has a new H145 on order for delivery in a few weeks.

Heléna Holt, CEO, explains “Standing down our aircraft has been a very difficult decision for us to make but one we have had to take in order to protect all of our crew.”

She added “Whilst the paramedics wear personal protective equipment (PPE) when treating and conveying patients, our pilots cannot operate the aircraft wearing PPE. They also cannot maintain a 2-metre distance between them and the patient. As we have no way of knowing whether a patient has coronavirus, this leaves them completely exposed within a small confined space. We hope our community will understand that this is an unacceptable risk.

“Please be assured that this is a temporary measure and subject to continual review. We will be working with colleagues in the NHS to identify other ways in which we can support the pandemic response as it develops.

“I would like to thank all of our supporters not just for the donations but also for their messages of support during this extremely challenging time. We will do our best to maintain our service and keep being there for patients, albeit by road not air.”

Cornwall Air Ambulance may cover parts of Devon while the Devon Air Ambulance is grounded.



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GREAT WEST: As of April 10, Great Western Air Ambulance Charity were supplying Specialist Paramedics in Critical Care to assist in transferring critically ill COVID-19 patients between hospitals in the region.

The crew are standing ready to respond when needed to help those most affected by the virus, working alongside our NHS colleagues in the fight against COVID-19.

GWAAC Specialist Paramedics in Critical Care will be joining part of a multi-disciplinary team carrying out inter-hospital transfers for intensive care patients who require advanced respiratory support. They will be bringing their specialist skills and equipment to deliver the best treatment to patients in need. At the time of the announcement the crews were considered to be fully operational.

KENT, SURREY & SUSSEX: The charity (KSS) will be extending its role at the frontline of the response to the coronavirus pandemic. Working in partnership with the NHS and South East Coast Ambulance Service NHS Foundation Trust (SECamb), KSS will transfer patients requiring critical care by land, with aircraft being used for the rapid delivery and recovery of the team rather than carrying COVID-19 patients.

KSS will continue to operate its primary service during this time. Although there has been a drop in major trauma incidents in recent weeks, linked to the reduction in road traffic, cessation of higher risk industry and a decrease in leisure activities, there is still a national commitment to maintain the Helicopter Emergency Medical Service (HEMS) to save lives.

KSS has been rated outstanding by the Care Quality Commission (CQC) across all five of its inspection key lines of enquiry - a level only achieved by a very small proportion of the UK's CQC-inspected healthcare organisations. It is the first Helicopter Emergency Medical Service to achieve this top rating in all categories/key lines of enquiry.

Inspectors rated the registered charity as outstanding for being safe, effective, caring, responsive and well-led – the five key areas which form the framework of the inspection. Whilst KSS has been registered since 2011 this is this first time the regulations have allowed the CQC to give a rating.

The CQC report highlights a wide range of outstanding practices at KSS including the service's 'strong leadership', 'thoroughly patient focused team,' 'open culture to reporting all types of incidents,' 'highly motivated staff' and 'strong, comprehensive systems and processes.'

KSS's collaboration with local, national and international partner organisations to help improve services to patients was also singled out. Inspectors praised KSS's engagement with its partners such as local NHS trusts and the Ministry of Defence.

Operating out of Redhill Aerodrome and headquartered in Rochester, KSS provides world-leading pre-hospital emergency care whenever and wherever required to save lives and to enable the best possible patient outcomes. Covering Kent, Surrey and Sussex, KSS serves a population of 4.8 million plus those who travel through the area – one of the busiest in the UK. Its crews of pilots, doctors and paramedics fly over 2,500 missions a year, and it was the first, and only, UK Air Ambulance to operate its helicopters 24/7. Of the more than £14M needed to sustain the service each year, 89% is raised by public donation and fundraising.

The CQC is the independent regulator of all health and social services in England. The inspection was carried out at KSS's Redhill Aerodrome premises in January 2020. A copy of the CQC report is available at www.cqc.org.uk



Meanwhile one of the duty air crews encountered a huge thank you message mowed into a grateful resident's garden. The KSS crew found the tribute while flying above the Nutley Windmill near Uckfield.

LINCOLNSHIRE & NOTTINGHAMSHIRE: Air ambulance officials say they will have to stop doing night flights to save money and because its medics are needed in hospitals. Lincs and Notts have already started scaling back night operations, from the start of May it will not cover night flights because some medics are needed to deal with coronavirus. The charity said the loss of funding events and closure of its shops would see an overall shortfall of £3M in funding.

TAAS: Two high-performance Skoda Kodiaq vRS SUVs have joined The Air Ambulance Service as Critical Care Cars. The diesel-powered cars are being used to support the charity's lifesaving missions across Warwickshire, Northamptonshire, Derbyshire, Leicestershire and Rutland.

The new vehicles are powered by a 236bhp, 2.0-litre engine, with all-wheel-drive helping our crews' access some of the more remote areas. The cars have been outfitted for our air ambulance service through Skoda's emergency services division, which offers conversions for the police, ambulance, fire and rescue, as well as a bullet-proof Superb – Emergency services vehicles can be fitted with blue lights, a custom livery, and bespoke control units.

THAMES VALLEY: One of the few charities to directly employ its medical staff was also praised in its recent CQC report. The air ambulance charity that covers the region to the west of London has been rated as Outstanding following an inspection by the Care Quality Commission between 8 and 9 January 2020. Thames Valley Air Ambulance is an independent ambulance service and is based at RAF Benson, Wallingford, Oxfordshire. The service primarily serves the communities of the Berkshire, Oxfordshire, Buckinghamshire.

The service operates one aircraft between 9am and 7pm, seven days a week and works with another air ambulance provider to provide regional air ambulance provision between 7am and 9am and 7pm and 2am through fortnightly rotation. The service has four critical care response vehicles (CCR) in its fleet. The service also provides at least one CCR from 7am to 2am, seven days a week, both to support the air ambulance and also out of hours. www.cqc.org.uk/location/1-5795248076



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The SCAA
H135©SCAA

SCOTLAND

CHARITY AIR AMBULANCE: Scotland's Charity Air Ambulance (SCAA)'s launched its second helicopter, G-EMAA, the long-awaited Helimed 79 based at Aberdeen, was launched during the social lockdown and therefore without any public ceremony on April 2.

As well as aiding those severely injured in road and industrial accidents, the crew will help transport the most poorly patients to hospital quickly, for example those suffering with sepsis or cardiac arrest. The EC135 T2e has undergone a months-long overhaul and upgrade before arriving at Aberdeen International Airport last week.

NHS AIR AMBULANCE: No sign of them yet south of the border in England but the popular Norwegian EpiShuttle isolation pods started being prepared for service in Scotland at the end of March. The sealed isolation pods entered service in Scotland to safely airlift COVID-19 patients mainly from the off-shore islands.



The Scottish Ambulance Service (SAS) will kit out two Loganair DHC-6 Twin Otter aircraft with the shuttles, one by April 1 and the other by mid-April. The SAS have bought eight of the Shuttles, two of which have been received by the end of March and placed under test. A further two were to arrive in mid-April and four more by mid-May. The total cost given was £500,000 in total.

While the fixed wing solution was being prepared for service SAS worked with the Royal Air Force to provide transfers off the islands using three Westland Puma helicopters based at Kinloss which undertook the transfer of some patients without EpiShuttle.

The shuttles are based on a design originally developed to enable the safe transport of highly infectious soldiers on the battlefield and have been used to treat patients with life-threatening disease such as Ebola.

Beyond the Loganair Twin Otter aircraft conversion to allow the carriage of a single EpiShuttle isolation pod work was underway on the conversion of a larger Loganair Saab 340 aircraft, capable of operating into all Highlands and Islands airports with the exception of Barra. The Saab offered the SAS an option of carrying two patients in the pods. Barra, with its unique beach airport, will only be served by the smaller Twin Otter. A normal air ambulance conversion of the Twin Otter would probably allow for two, however, due to the nature of COVID-19, special precautions are needed and the bulk of the EpiShuttle leaves insufficient space.



The Loganair aircraft are based at Glasgow Airport but are capable of operating throughout Scotland. Loganair pilots will be operating the aircraft as usual, and all involved received a special briefing from the airline and the SAS on the nature of the deployment in late March. The Loganair facility was effectively launched on April 3.

The aircraft services provider for the NHS air ambulance, Gama Aviation, says it is “strongly focused” on maintaining business continuity through the coronavirus crisis, but the uncertain trading environment triggered by the pandemic is expected to “severely impact” its performance in 2020.

The Farnborough, UK-headquartered company says its business units – which include business, commercial and military aircraft MRO, air ambulance provision and business aviation charter and management – remain operational and the pandemic’s impact on revenues has so far been “limited”. [Flight]

WILTSHIRE: The Bell 429 operated by the charity was not available from late March into April. This absence appears to have been separate from planned maintenance, but the clinical need was covered by cars.

YORKSHIRE: At the start of April one of Yorkshire's two air ambulances was grounded after medical staff were redeployed back to emergency medicine and ambulance roles. Yorkshire Air Ambulance stood down to operating only one helicopter with critical care paramedics aboard from its base near Wakefield. A matter of days later the second helicopter was also taken out of service.



All the air ambulance doctors, and the paramedics are going back to roles in emergency medicine, anaesthesia and critical care. The move was because of the "unprecedented crisis" of coronavirus.

A number of temporary field hospitals, NHS Nightingale Hospitals, set up in conference facilities across the country were needing staff that required the stand-down of the air ambulance. The opening of Nightingale Hospital in the Harrogate Conference Centres, Yorkshire, increased the need for added expert care in land ambulances. The Yorkshire Air Ambulance and Yorkshire Ambulance Service NHS Trust announced at the start of April that critical care consultants were to be redeployed back to their respective hospitals to focus on emergency medicine, anaesthesia and critical care.

At the time of the grounding it was expected that the aircraft may be used for transferring essential medical equipment or personnel across the region at some point in the future.

Unexpectedly, nearly a month later, on 25 April one of the H145s was returned to service at Nostell. The crews that had been withdrawn to assist in the pandemic were no longer required as the authorities had indefinitely delayed the emergency hospital they were withdrawn to staff at Harrogate. The existing hospitals continue to manage the surge in Coronavirus cases within the current intensive care capacity.



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The second helicopter is offline undergoing its scheduled mandatory annual service. There has been a downturn in life-threatening 999 calls whilst people are isolating at home, resulting in slightly fewer callouts.

UNITED STATES

NATIONAL: Early last month the Association of Air Medical Services (AAMS), representing the air medical transport industry submitted a letter to the Department of Health and Human Services with an urgent request to rapidly distribute money to emergency air medical providers from the Public Health and Social Services Emergency Fund. In order to ensure the sustainability of the air ambulance community's labour force through the challenges of the next six months, air ambulance labour costs will increase by an estimated 50%. AAMS anticipates a total six-month need of \$254,424.00 per aircraft, for a total allocation of \$363,571,425.00

With people staying at home to fight the virus there has been a near 50% decline in patient transport volume. Nonetheless air services must remain a state of readiness for patients with emergency medical and trauma needs as well as COVID-19 patients needing transport.

AAMS continues to monitor the COVID-19 pandemic in partnership with the EMS COVID-19 (Coronavirus) Working Group, hosted by the NHTSA Office of EMS and includes CDC, DHS, and DHHS Office of Preparedness, as well as multiple National EMS affiliated associations. AAMS provides updates and resources for its members and the public www.AAMS.org.

FLORIDA: The Health Care District of Palm Beach County, Florida — a FAA certificated air carrier in southern Florida, also known as Trauma Hawk — has signed a contract to purchase two Leonardo AW169 helicopters. Palm Beach County is the largest county by area in Florida with more than 2,300 square miles. The District maintains a well-organized instrument flight rules (IFR) infrastructure combining special instrument approaches and transition routing, plus an extensive FAA-approved IFR pilot training program to provide service during inclement weather. The AW169 is also equipped with Localizer Performance with Vertical Guidance (LPV) GPS, a precise navigational aid, to further enhance safe approaches and landings during low visibility.

The AW169 features a spacious 222-cubic-foot cabin providing 360-degree patient access essential for critical care. Capable of rapid patient transport, Trauma Hawk's custom medical configured cabin will be the first from Leonardo to feature a longitudinal roll-on stretcher system to minimize workload and patient movement during loading and unloading.

Ed: Operating since the late 1980s as the Trauma Hawk, Palm Beach County, currently owns and operates two air ambulances and has previously favoured US products from Bell and Sikorsky. The AW169 will replace 20-year old Sikorsky S76-C+s. The earlier aircraft offer 206 cubic feet of patient care area.

WYOMING: Some Wyoming residents have received notices saying the state has taken away their ability to purchase a membership for air ambulance service. A membership pays for an air ambulance if needed.

Back in January 2019, the Wyoming legislature passed a bill that would try to have Medicaid cover air ambulance costs. Part of that bill said for an air ambulance company to continue to sell memberships, it needed to become certified with the state's Department of Insurance and essentially become an insurance provider. The deadline to provide services without that certification was April 1, 2020.

Gillette State Rep. Eric Barlow said since most air ambulance companies didn't do that; they can't sell memberships anymore. He said this is the fault of the companies.

"In my view, the burden is that was actually on them. They knew the law. We believe they knew the law and obviously as evidenced by their notices, that they knew the law and knew when it changed, but they chose not to comply," said Barlow.

Barlow said the Department of Insurance sent out a couple of notices in the past months reminding air ambulance providers of the deadline. He said providers still can certify in the state if they wish to do so.



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FIRE

EUROPE

SPAIN: Babcock has continued to provide aerial firefighting services in Southern Europe throughout the COVID-19 pandemic. Air crews and aircraft have flown over 150 missions since the start of the year in Spain and Italy and remain at 100% availability as the peak firefighting season starts.

In Spain, teams have fought 40 fires since February with operations mainly taking place in North Spain where fires are more common at this time of year. In Italy there have been 121 missions since the beginning of the year, with two big fires occurring over the Easter weekend. The first fire spread over 20 hectares in the upper Chiampo valley near Verona. And the second, on Easter Sunday, saw several outbreaks in the very inaccessible forests of Mount Mutria, between Molise and Campania in the south of Italy which were so severe that two Canadair firefighting aircraft were needed to tackle the blaze.

SWEDEN: Saab has received an order from MSB, the Swedish Civil Contingencies Agency, regarding Sweden's aerial firefighting capabilities. The contract is valid during the years 2020-2023.

The order is for the capability to fight fires with two firefighting aircraft, from 1 April to 30 September, through to 2023. Under the contract there is also the opportunity to trigger an option for two more aircraft, beginning with the 2021 fire season. This resource will be available for Sweden and for EU. Saab has during a period of one year, established aerial firefighting capabilities, using the Air Tractor AT-802 F firefighting aircraft, with the associated pilot and technician skills, as well as the specific permits for their operation.

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The advertisement features a blue and white color scheme with a background image of military helicopters in flight against a sunset sky, and silhouettes of soldiers in the foreground. The text is overlaid on the image in various sizes and weights, including a large 'BMS' logo and the phrase 'ULTRA LONG RANGE DATA LINKS'.

The AT-802 F is a water-bombing aircraft that in the event of a forest fire can release 35,000-50,000 litres of water per hour. The firefighting aircraft will be based in Nyköping, where Saab already has aviation operations for, among other things, aerial target towing and support for the Swedish Coast Guard's aircraft.



From Nyköping, firefighting aircraft can within two hours reach Copenhagen or eastern Finland and within three hours, Luleå in the north of Sweden. If necessary, the firefighting aircraft can be based at another location with advanced technical and maintenance resources. Rapid response to fires is crucial. [Saab AB]

UNITED KINGDOM

NORTHUMBERLAND: One of the many attributes of a light aircraft is the 'birds eye' view of the ground below and many countries, including Australia, Canada and Spain, use small 'spotter' planes to locate and report wildfires in remote areas. Not all are dedicated to the task.

Recently, the Northumberland Fire & Rescue Service, together with the Northumberland National Park Mountain Rescue Team, were called out to fight a wildfire on Simonside, two miles south west of Rothbury, on the Easter weekend. The fire then flared up again a week later. The firefighters from Rothbury, Alnwick and Amble, together with members of the mountain rescue team, gamekeepers and estate staff, spent almost three days to get the fire, in the Northumberland National Park, under control.

The extent of the fire, approximately 40 hectares, the size of 40 rugby pitches, was photographed from the air by a member of the UK Civil Air Patrol, also based in Northumberland. Civil Air Patrol pilot, Storm Smith commented, *"This very large wildfire has left an enormous black scar across the top of the hill."* Wildfires, which are a particular danger during extended periods of warm, dry weather, are most easily seen, pinpointed and reported from the air by a 'spotter' plane. ©UK CAP



SEARCH & RESCUE

JAPAN

COAST GUARD: Japan's largest Airbus Helicopters Super Puma operator, Japan Coast Guard (JCG), has placed a new order of two H225 helicopters. This follow-on order brings JCG's Super Puma fleet to 15, comprising two AS332s and 13 H225s. The new helicopters will be utilised for territorial coastal activities, security enforcement, as well as disaster relief missions in Japan. [airbus Helicopters]



INDUSTRY

Air Covers Ltd, a leading specialist in the design of bespoke protective covers for the aerospace and marine sector, has won the Queen's Award for Enterprise for International Trade 2020.

These Awards are the most prestigious award a UK company can receive. Her Majesty the Queen approves the winners, which recognises companies of all sizes.

"We are delighted to have been chosen for this award," said John Pattinson, Managing Director. "It is a terrific achievement for our amazing team who learned of this win today. Such an accolade is especially welcome to us, during this time of international uncertainty, and we hope it will further drive our business forward."

Air Covers, based in Wrexham, North Wales, was founded by husband and wife team John and Sasha Pattinson in 2006. Their first customer was for the smallest piston helicopter. Today, they make covers for everything from Apache helicopters to commercial airliners. In 2019 Air Covers supplied protective covers to 29 countries.

The business supports military, emergency services, commercial and private aircraft sectors, the offshore industry and super-yachts. As well as being a regular supplier to the UK MoD, Air Covers has a diverse customer list, which includes Air Forces in Spain, Germany, Sweden, Italy and the Middle East, along with prominent helicopter operators including Bristow, CHC and Babcock.

The Queen's Awards for Enterprise are the most prestigious business awards in the UK. The awards were first established in 1965. The awards celebrate the success of exciting and innovative businesses which are leading the way with pioneering products or services, delivering impressive social mobility programmes or showing their commitment to excellent sustainable development practices.

During the lockdown with a temporarily reduced team on site, Air Covers is using its advanced CNC cutting capabilities to work for the NHS supply chain.



First responders went to the Department of Homeland Security's Science and Technology Directorate to seek out gloves that were more robust than the designs they had been using – most barely lasted three sorties when used to guide hoist cables. The 'Directorate partnered with **Higher Dimension Materials (HDM)** located in Oakdale, MN, United States a company that developed a revolutionary fabric material marketed as SuperFabric®, which is abrasion, cut, puncture, and flame resistant and popularly used for outdoors shoes and outerwear set about developing a new glove.

Aided by research into the wear patterns of old operator gloves HDM helped to identify the requirement for producing a more durable design with greater dexterity.

Other manufacturers have attempted to meet the needs of operators by overlaying rubber dots on top of fabric. SuperFabric employs a similar concept, but with polymer resins dubbed "guard plates." For easy bonding on top of fabric, guard plates made from epoxy resins which are hardened through a chemical curing process. Additionally, strength enhancing compounds like aluminium oxide, commonly used in ceramics, are used to make the guard plates even more resistant to damage.

Late last year a series of field tests by crews from the United States Coast Guard, the North Carolina National Guard, and San Diego Fire and Rescue provided feedback on the gloves for HDM. A final version of the gloves should be ready for use by the end of 2020. [Alison Gasperini]

Russian Helicopters and their Mexican partner – the **Craft Avia Center** announced plans to form a partnership to market the Ansat multi-purpose helicopter in Mexico several years back, with the Mexican side opening a service facility earlier this year. The global economic slowdown and coronavirus pandemic has not held Mexico back from taking delivery of its first Ansat helicopter.

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Police Aviation News includes materials produced for it by Ian J Commin of Insight Design of North Burnham, Slough SL1 6DS. This includes the banner titles and the PAvCon logo. In addition from time to times images specifically altered by Insight Design and others but originally produced for McAlpine Helicopters [now Airbus Helicopters 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, or such information may have been lost. Such images may be marked 'File' or 'PAR Collection'.

The first helicopter for the Mexican market, which has been disassembled, is on its way from Moscow to St. Petersburg in two containers. It was due to be loaded onto a ship in the first week of April with arrival in Mexico in early May.

Craft Avia Center plans to purchase 13 Ansat helicopters for themselves and clients, with 27 more helicopters planned to be ordered for Mexico's national air ambulance project. The Ansat is presently undergoing certification, which is expected to be completed by the end of the year. Back in 2018 there were plans for Mexico to assemble Ansat helicopters, Kazan certified a version of the helicopter with a medical module in 2015, with the certification said to be compliant with all international standards.

The current model is powered by a pair of 207k Pratt & Whitney 630 hp engines but there is an alternative Russian-made engine in development. [Sputnik]

Albany, Georgia-based **Thrush Aircraft**, makers of a variety of turbine-powered agricultural and firefighting aircraft said in a news release that despite the wide-ranging effects of the Covid-19 virus on the US economy, the company enjoyed a very strong first quarter. The company's 2020 order book so far includes some 17 aircraft for both spray and firefighting operations, including Thrush 510Ps, 510Gs and 710Ps destined for customers in the United States, Canada and overseas. Several of these aircraft are expected to be delivered over the next 30 days."

Thrush also said it added additional staffing and capabilities during this time to support further growth in the year ahead. "



Saab Digital Air Traffic Solutions (SDATS) has been selected to provide a Digital Tower system as an Operational Concept Demonstrator for the Royal Air Force at their air force base by Lossiemouth in the United Kingdom.

A technological evolution in Air Traffic Control (ATC) for civil airports is opening up new possibilities which are equally relevant for military airfields. The RAF is investigating new concepts and capabilities, which could eventually change the way military ATC is conducted, both during normal operations and during time of increased threats.

The system will be installed at RAF Lossiemouth for demonstration and evaluation during 2020 and 2021. This will enable the RAF to assess the latest technology and evaluate future requirements for Air Traffic Control.

The digital air traffic control solution is a breakthrough in air traffic control and was introduced during 2015 in Sweden when Örnköldsvik Airport became the first airport in the world with remote air traffic control. In the UK, Cranfield Airport is operating our system and London City will also operate the Saab solution starting later this year. In the Netherlands, SDATS is currently working with LVNL, to provide a national roll out for Dutch airports. [Saab AB]

On April 8 **Leonardo** announced the completion of the acquisition of Kopter Group AG (Kopter) from Lynwood (Schweiz). The purchase price, on a cash and debt free basis, consists of a \$185M fixed component plus an earn-out mechanism linked to certain milestones over the life of the programme, starting from 2022. The acquisition of Kopter allows Leonardo to further strengthen its worldwide leadership and position in the rotorcraft sector, in line with the Industrial Plan's objectives for the reinforcement of the core businesses. [Leonardo]

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To serve the training needs of first responders and essential staff flying at night using NVGs, **Aviation Specialties Unlimited** (ASU), have developed a new instructor led web-based offering for required recurrent ground training.

"We know that recurrent training must continue for pilots and crew members, and it is difficult to travel and train amidst the COVID-19 pandemic," said ASU Director of Training Josh Grier. "Our Chief Instructor Pilot Tony Tsantles will be leading our new online courses to address this need."

The new ASU online recurrent training will be made available to anyone, anywhere that requires recurrent training. The course is designed to review NVG operational techniques and aeromedical factors during all phases of flight. Students will also refresh their NVG regulatory and procedural guidance on IAW 14 CFR 61.31 (k)1. Training will meet and exceed all 8900.1 guidance for Part 135 operators.

"The classes will be live, interactive, and engaging," said Tsantles. "Participants will obtain a certificate of completion. The class will allow organizations to reset their academic currency. We wanted to make sure that all the operations around the world that are flying remain compliant on their training requirements, and we wanted to create something to help them."

ASU said the first classes would be available in the middle of April. Classes will be offered for both domestic and international operators that have current NVG certification.

"ASU remains focused on helping our customers during this international pandemic," said ASU President Jim Winkel. "We know those out there on the front-line need sustainment and support so they can continue to save lives at night. We want to do our part in the fight against COVID-19. In a small and tangible way, our virtual classroom may help to accomplish this."

In addition to the new classes, ASU recommends the following guidelines for disinfecting NVIS equipment. For AN/AVS-9 Night Vision Goggles, reference the Operator's Manual section for Care and Maintenance. To disinfect aircraft lighting with NVIS modifications, reference the Instructions for Continued Airworthiness, Section 5-5. For both NVGs and aircraft lighting, ASU recommends using 90% Isopropyl alcohol for no residue.

For more information about the new class or to register visit www.asu-nvg.com/onlinetraining

Carrying light sensor pods on the support struts on such as the Cessna 172 is now accepted but going bigger to perhaps carry something the bulk of the likes of a Wescam MX-10 on a light single requires a great deal of work. Over three years of design, prototype, testing, tooling, manufacturing eventually faces the team with facing up to the final flight test for FAA to gain an STC. The development team of **Meeker Aviation**, Airfilm and Aircrafters spent the last week of April flight testing, there is a little more to go, but all appears well.

Look no MX-10! Well it seems you do not need to actually invest in the real thing to do the testing. The silver parts are machined test articles to replicate the exact maximum weight and size limits for the mounts. In this case the MX10 was the target maximum size and weight so other lighter sensors can be substituted in the same STC.

[Meeker - Facebook]



COVID-19 ACTIVITIES

Late in April the UK Secretary of State for Transport, Grant Shapps, gave a press briefing in which he referred to the newly established COVID-19 '**Transport Support Unit**' which includes 4 aircraft, including a Boeing 737, operated by the Maritime and Coastguard Agency. He also mentioned a drone trial to transport medical supplies from the mainland to St Mary's Hospital on the Isle of Wight.

By making use of the people and the resources of the Department for Transport, its agencies and arm's length bodies, the operation will be helping NHS trusts and local resilience groups to fight the pandemic.

Over 8,500 specialist volunteers and 9,000 vehi-

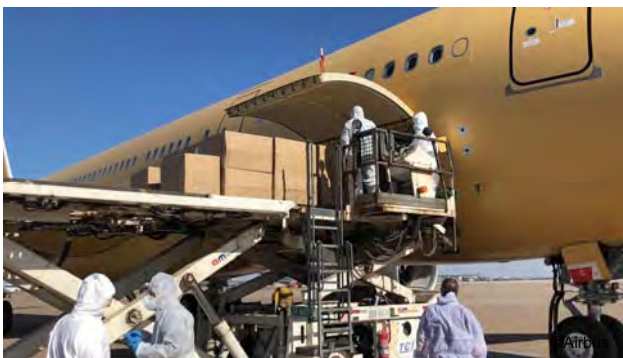


cles from across the transport sector support the national effort. This includes the MCA fixed wing aircraft, helicopters, ships and trains. £8M had already been earmarked for testing drones, and how they might be used for delivering goods in the years and decades ahead, that has now been focussed on the carriage of medical supplies and equipment to the Isle of Wight.

The Transport Support Unit resources will help move emergency patients and medical supplies, deliver personal protective equipment (PPE) to hospitals, and distribute food parcels to vulnerable people.



Worldwide Flight Services (WFS), the world's largest air cargo handler, has worked alongside Airbus and Bolloré Logistics to expedite the distribution of two million face masks to health workers in France and Spain to support the live-saving medical teams in both countries battling the outbreak of the coronavirus. The three companies – all leaders in their respective fields and all headquartered in France – joined forces to support the governmental and healthcare sector response to the Covid-19 crisis. With demand for face masks to help protect healthcare workers, public service employees and the general public from the virus far exceeding supply, Airbus operated one of its own A330-800 passenger aircraft to Tianjin in China to collect the shipment.



Co-ordinated with its logistics partner Bolloré, the Airbus flight returned to Toulouse, where WFS' cargo handling specialists were ready to quickly offload the cargo and make the necessary preparations for the masks to reach their final destinations across France and Spain. The WFS team broke down the shipment, immediately despatching masks into the healthcare sector in France as well as repalletizing and loading the masks destined to help the relief effort in Spain.

From Toulouse, an Airbus A400M carried face masks to Getafe in Spain, completing the operation on 24 March.

WFS took just 72 hours to launch a new 'emergency response' cargo handling operation at Liege Airport following a request from the airport to help increase its capacity to accept more freighter flights carrying urgent medical equipment into Europe to tackle the coro-

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navirus crisis across the continent.

WFS was able to complete its fastest-ever opening of a new station by transferring highly trained, experienced cargo handling staff from its operation in Brussels, ensuring full compliance with the company's first priority of operational safety and security. Essential equipment, including forklifts, slave masters, slave pallets and a truck dock, was also sourced from nearby WFS stations in both Belgium and the Netherlands. The cargo handling terminal is located within a brand new but previously unoccupied airside warehouse and has been made available to WFS by Liege airport authority to support the sudden increase in demand for all-cargo operations. As one of Europe's premier freighter hubs, Liege is acting as a central hub in the region for medical equipment and supplies arriving from China and other parts of the world. WFS expects to handle up to 14 freighter flights per week during this emergency response phase of operations, which is currently expected to continue until the end of May. WFS will also provide handling services for outbound cargo shipments from Liege.

Omni T xi A reo adapted aircraft to transport workers in the Oil and Gas sector with suspected COVID-19. The measure aims to offer companies operating in the sector the safety of its passengers and crew of aircraft.

The AW139 and S76C+ helicopters were adapted as sanitary aircraft to transport passengers with suspected flu or cold, with lined seats, monitoring by a nursing technician, limited number of seats for passengers, use of protective curtain to isolate the cabin from the pilots' cockpit, forced cabin ventilation and the use of protective masks and coveralls for the crew. After each flight, the nursing technicians carefully clean the aircraft.

For cases of suspected or confirmed passengers with COVID-19, transport will be carried out by an S76C++ aeromedical aircraft, which has a stretcher and the presence of medical staff on board, in addition to the same care and asepsis that are being applied to sanitary aircraft.

The sanitary and aeromedical rescue aircraft to transport passengers with suspected flu or COVID-19 are available to all customers with contracted flights and those in the sector who may need this service

In March the COVID-19 was hitting Italy the hardest and as the home producer **Leonardo** were at the forefront of in-country aid to the people and government.

Through the use of two C-27Js Transport Aircraft of the Aircraft Division and one ATR 72, and thanks to the Company's customers who have endorsed the initiative, Leonardo and its crew supported "Protezione Civile" by carrying out a series of shuttle flights between Italian airports and other destinations as required during the emergency including international airports, to ensure the transportation of medical materials (ventilators, masks, etc.).

In addition, the Helicopters Division has made available its pilots and 3 helicopters (2 AW139 and 1 AW189) in different configurations providing technical support to the Armed Forces' helicopter fleet, organisations, institutions, Police Forces and to all Leonardo helicopters engaged in the emergency, including maintenance and other services for "Protezione Civile" during the healthcare operations.

At the Leonardo-Grottaglie site, the Aerostructures Division, has launched the first production batch of valves, through additive manufacturing technology (3D printing) to support the initiative of Isinnova, a company in Brescia, which has developed a plastic valve project which allows the modification of a particular model of snorkelling mask and, which, in turn, transforms it into respirators for sub-intensive therapies. The same activity will be carried out at the Electronics Division La Spezia site.

Safran has adapted the Easybreath Subsea snorkelling mask from sports retailer Decathlon to protect medical personnel from airborne droplets that could transmit the coronavirus, in conjunction with the engineering firm Segula Technologies and with support from the French Armed Forces Biomedical Research Institute (IRBA). Safran and Segula Technologies are offering open access to the files needed for 3D printing, based on a free license, thus allowing hospitals and healthcare professionals to make their own adaptation kits. Safran has already 3D-printed these kits and is providing 200 modified masks to university hospitals.

Virgin Atlantic has teamed up with Virgin Group's not-for-profit foundation, Virgin Unite, to fly a special charter flight from Shanghai to London, bringing in essential medical supplies and PPE equipment for the National Health Service (NHS).

The Boeing 787-9 aircraft operated the VS251 from Shanghai which departed at 11:40 local time on 3rd April landing at 16:50 on 3rd April into London Heathrow.

Manned by seven pilots and four cabin crew, the aircraft is carrying over 350,000 items of essential PPE supplies and medical equipment including respirators, ventilator parts, face masks, scrubs, aprons and eye protection in both the hold and in the cab-



in of the aircraft. These essential items will help keep NHS heroes working on the frontline safe and will support patients who are in great need.

Virgin Atlantic is one of several Virgin Group companies supporting the NHS in its response to the COVID-19 outbreak. Although currently the need is thankfully non-urgent the airline's highly skilled people have been approached to volunteer at several initiatives including the new NHS Nightingale Hospital, the London Ambulance Service, other NHS Hospitals and for the NHS Volunteer Responders.

Elsewhere in Europe **Lufthansa** is operating the cargo flights to Munich with four Airbus A350 passenger aircraft and is flying similar missions with six Airbus A330 planes based in Frankfurt. With these 10 passenger airliners, Lufthansa has created additional airfreight capacity and expanded the Lufthansa Cargo fleet, which has 17 freight-only aircraft. The daily cargo flights with the passenger jets are expected to continue at least until mid-May.

The COVID-19 pandemic is bringing together all sorts of resources in the common good and existing emergency services are modifying their modus operandi to facilitate a fast-moving situation. Last month a regular correspondent, responsible for promoting the volunteer **Civil Air Patrol [CAP]** in the north east highlighted what he believed the volunteer Civil Air Patrol could do for the nation and within days just such a mission for the health service emerged.

The UK CAP is a charity best known for its fleet of light aircraft, including autogyros, which may be called upon for a multitude of roles including air observation, air search and air to ground photography in support of the 'blue light' emergency services and local government civil contingencies units. Now, a new role, in response to the COVID-19 pandemic, is a 'Pony Express' styled rapid courier service to deliver urgent medical supplies for the NHS with the minimum of delay, using aircraft with a relatively high cruising speed and a good radius of action.

One such aircraft in the charity's fleet is the Van's RV-7 which cruises at 140 knots, (160 mph) and has an un-refuelled radius of action of 300 miles, a return journey of 600 miles, with reserve fuel to deal with any contingencies. Moreover, with a crew of one, the pilot, the aircraft is fully compliant with the Government's instructions on 'social distancing'. The charity has updated its operations manual to reflect the government's rules and regulations with regard to COVID-19.

On Sunday, 5 April, at the height of the coronavirus lock-down, UK Civil Air Patrol pilot, Paul Stone, a former member of the Royal Navy Fleet Air Arm, responded to a request from his Local Resilience Forum in Lancashire to transport a critical piece of health equipment, a printed circuit board for a medical ventilator, from Oxford to Kingston upon Hull. The request for assistance required immediate action because the ventilator was required the next morning in Birmingham. After accepting the request for assistance and after obtaining authority to complete the sortie, Paul flew his Van's RV-7 from his base at Blackpool to Oxford to collect the required electrical component and then flew to the grass landing strip at Beverley airfield, home of the Hull Aero Club, in the East Riding of Yorkshire. Humberside Airport was unfortunately closed. From the point where the request was made to delivering the component took just 3 hours and 30 minutes. After returning to Blackpool Paul made the comment, *"This was an incredible piece of teamwork.*



Today would not have been possible without the exceptional support of colleagues at Blackpool, the en-route air traffic control services at Manchester, Birmingham, Doncaster and Oxford and Colin Hazel at Beverley airfield who opened his airfield at such short notice."

With a minimum number of people required to operate a light aircraft, often just one person, the Civil Air Patrol fleet is a cost effective and efficient way of supporting the COVID-19 national emergency, complementing the role of military and other specialist aircraft that are in high demand during these unprecedented times. Paul added, *"I think this provides the Government with another solution on how to transport smaller loads around the country at pace."*

Ed: A great little volunteer story and oh so similar to the letter last month. And yet some would have it that it should never have been an expressed opinion.

CAP has a number of bases around the UK and they have a range of aircraft types and pilots of different skill levels – although most are highly skilled either from their current or past careers as ex-military, or emergency services, airline pilots [or all of them].

The sortie in the story was an aircraft from Lancashire, in the north west, but one of the units in the north east has a similar Van's RV-7 and could easily have undertaken the same mission if called upon.

The **British Helicopter Association (BHA)** has completed a contract to facilitate freight and passenger transport by air in support of coronavirus response across the whole of the UK. The Crown Commercial Service (CCS) – the UK Government contract management organisation – has to get a simplified document produced which will ensure that payment is made from central Government funds within 14 days of the task being completed.

BHA has over 180 helicopters available on call for this work, including 80 onshore and a further 100 which can be diverted from offshore work as required. All aircraft are in the fleets of CAA-approved operators who hold an Air Operator Certificate (AOC), a key safety aspect for this initiative. Every helicopter involved is covered by a Safety Management System, as well as all the other aspects of commercial flying required by the CAA. This ensures that every flight channelled through this coronavirus response scheme is being operated to the highest standards by professional pilots.

Working with a network of over 1000 3D Printers across the nation, UK Mission Hardware OEM **RDDS Avionics Ltd** has committed to producing 100 Protective Visors per week, for delivery to NHS sites across the nation. The country-wide initiative is the brainchild of the UK National 3D printing society, which is bringing together Businesses, Universities and Individuals with access to 3D printers to provide another source of PPE for the UK's frontline medical personnel, due to the unprecedented demand for PPE that is required to help safeguard frontline carers and NHS workers as they work hard to care for those suffering from COVID-19.



Swiftly building a supply chain network across the country, all the printed visors are distributed through N3DPS, free of charge to NHS Locations, Support sites and Care Homes who have requested help. For those who don't know, 3D printing technology is moving forward leaps and bounds since it was first invented in 1983, used for rapid prototyping, artwork and more, FDM 3D printing is achieved by a motorized extrusion nozzle, pre-programmed to move over a heated build platform and apply a thin layer of thermoplastic, layer by layer, to form a finished object.

For those looking to support the initiative, there are a number of ways to help, firstly, anyone with access to a 3D Printer or Laser cutter can download the design from <https://national3dprintingsociety.co.uk/medical-am-covid-19/>, secondly, if you'd like to support the programme, a Just Giving has been set up to help purchase raw materials for at-home printers on <https://www.justgiving.com/campaign/N3DPS>. *RDDS Avionics Limited is an OEM of video displays, recorders and computing hardware for airborne applications. Founded in Kent in 1993, RDDS has built an industry leading reputation for the manufacture, supply and support of equipment for Aircraft worldwide. Identified as a Key Supplier by the UK Government, RDDS is working hard to maintain production while keeping their staff safe during these unprecedented times.*

Furthermore, the RDDS team wishes the whole Police Aviation community the very best during these trying times, we hope you are keeping safe and look forward to seeing you all again at PAVCon 2021!

The **FAA** has issued guidance to airlines who want to take the seats out of idle aircraft and fill them with cargo. The drastic drop in passenger traffic has had a parallel effect on available cargo space. Some airlines were flying cargo-only flights with empty seats upstairs but there is now a formal approval for temporary freight conversions. Freight can be carried in the overhead bins, on the seats or on the floor, with the seats removed. The seat tracks can be used for tying down the cargo. The weight and balance have to be calculated and the floor strength considered in placing the freight. In addition, one or more airline employees have to ride with the cabin freight because there are no fire detection systems in the passenger cabin. The freight must not hinder access to the fire extinguishers.



Ed: It has become clear that dependence upon China and the Far East as a production base has been found to be wanting. Even if the products can be found there are clear weaknesses of price and vulnerable supply chains. The cheap Far East production base is now anything but economic and many countries are dusting off home production that has long been neglected.

3D printing is being put forward as an ideal solution for self-sufficient and flexible production and many aerospace companies across the Western World are switching their production to include PPE in various forms. In some cases horror is being expressed when it is suggested that used surgical gowns might be washed rather than incinerated or sent to land-fill. There is lots to relearn.

ACCIDENTS AND INCIDENTS

10 March 2020 Airbus Helicopters AS365N2 N611LL Air ambulance of Life Lion Critical Care Transport, Hershey, Pennsylvania, USA. While en-route to an outlying hospital for an inter-facility transport the pilot and one of the aircrew noticed a burning electrical smell. It was then noted that the "Battery Switch #2" and "Bus Couple" caution lights illuminated on the Warning Caution Advisory panel. The aircraft was diverted to the nearest suitable airfield approximately 5 miles away, Carlisle. The aircraft landed without incident. Post flight inspection revealed a chaffed wire behind the 6 alpha panel on the center console. [Concern]

29 March 2020 AIA Westwind RP-C5880 Air ambulance chartered from Lionair Inc./ Advance Life Support Life Line, by Philippine Department of Health to fly to Tokyo, Japan. Crashed and burned at the end of Runway 24 at Manila International Airport, Philippines. The airframe was largely intact but gutted in the intense fire. Reports at the time attributed to the Philippine Medical Association vice president, said one of the passengers of the aircraft is a patient who wanted to be transferred to Japan because there is a COVID-19 patient in the previous hospital where the patient was admitted. The same report suggested that the aircraft caught fire while it was taking off rather than after a crash. Fire and Rescue team immediately responded but nobody aboard survived the conflagration. [Media]

SAFETY

NASA Aviation Safety Report Newsletter: RNAV Approaches

https://asrs.arc.nasa.gov/publications/callback/cb_483.html

Aircraft Disinfection Information – Dudley Crosson, APSA Aeromedical Liaison

<https://publicsafetyaviation.org/images/Videos/Disinfecting.mov>

Human Factors Newsletter

<https://decodinghumanfactors.com>

UNMANNED

Schiebel's plans to break into the US market have taken a very long and bumpy road but the latest news is that Boeing have recently demonstrated the capability of the Schiebel S-100 Camcopter unmanned air vehicles to deliver supplies to U.S. Army troops – the first time an dedicated autonomous air vehicle with vertical take-off and landing resupplied Army troops.

Some years ago, Kaman were involved in undertaking similar tasking using a converted K-Max helicopter for the US Marines, but that was a large optionally piloted helicopter rather than a UAS.

A Boeing team flew the S-100 on 31 missions, delivering 726 kg (1,600lb) of "simulated blood and ammunition" via a cargo winch during the military exercise in which the S-100 flew the missions autonomously.

Two years ago, it was expected that the FAA would certify the S-100 for use as a craft that could undertake utility patrols and inspections. Although a lot of private equity was aimed at the project, it remains pie in the sky. Back in the December 2017 issue of PAN there was an upbeat story on how a new dawn was promised from a project being put forward by Florida based FlightScan Corporation LLC [FSC]. Camcopter S-100 to fly safely in U.S. airspace. As the January 2019 issue of PAN stated, FSC and the project they launched in 2014 came to an end with 2018.

Schiebel has introduced a new mobile antenna system to its Camcopter S-100 unmanned aircraft system (UAS) product range, expanding the line-of-sight (LOS) connectivity between the company's existing antennas and the UAS, the company told *Jane's*.

The mobile antenna is derived from a Salzgitter Maschinenbau AG (SMAG) mast and is designed to support the company's existing antennas, which have ranges of up to 200 km, boosting its operational flexibility for users.

Jane's understands from a company spokesperson that the system is called the SMAG 25 – which denotes its ability to extend up to 25 m in height – and enables users to "establish a [LOS] even when high obstacles, like trees, are in the way".



On April 8 the UK CAA issued revised operating conditions for the operation of police unmanned aircraft. The easements in ORS4 No.1375 relate exclusively to the operation of drones during the current Corona-virus outbreak.

A general exemption allows a more flexible, but controlled, use of a small unmanned aircraft in support of the Police response while enforcing the Government restrictions resulting from the pandemic.

The document exempts any member of the United Kingdom Emergency Services acting as the person in charge of a small unmanned aircraft in support of a United Kingdom Police Force responding to an enforcement of the Government restrictions placed on the public as a result of the COVID-19 pandemic and where the observance of the restrictions would be likely to hinder this objective.

When employing this Exemption, the small unmanned aircraft must not be flown: (a) other than by a remote pilot flying in accordance with a valid operational authorisation (permission or exemption) issued to a United Kingdom Police, Fire or Ambulance Service, as amended by this exemption; (b) at a height exceeding 500 feet above the surface, or 100 feet above the highest obstacle within a horizontal distance of 50 metres of the small unmanned aircraft if this is higher, provided that: (i) the remote pilot must be able to fully monitor the associated airspace for conflicting aircraft for the purpose of avoiding collisions; (ii) when operating at a height exceeding 400 feet above the surface, a competent observer must be used at all times.

In the USA there has been a similar loosening of the regulations pertaining to the use of drones by the emergency services. Contrary to the assurances given by many start up drone operations, some US police departments have started using drones to tell people to social distance and distribute coronavirus updates. While criticism has been muted in Europe and the Far East that is not the position in some parts of the US where public protests have taken place about Drones spying on the populace and about many of the restrictions imposed in the name of ensuring public safety.



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DRONES FOR PUBLIC SAFETY & EMERGENCY SERVICES

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PEOPLE

GVH Aerospace, a global aerospace company headquartered in the UK and including Nova has welcomed **Clifton Lombard** to its Bournemouth office as its Business Development Director for EMEA and Special Missions. Having previously worked for Babcock Special Mission at Staverton Clifton has a wealth of experience in the special missions market.

Henri Stell, the Head of Sales Western Europe at Airbus Helicopters has left the company after more than 34 years, on March 31st. From his early days at Aerospatiale until this last position in Marignane (France), he worked for nine manifestations of what became Airbus. He travelled to more than 30 countries and spent 15 years posted away from his home country.

TV Star **Carol Vorderman** has donated her personal Diamond DA-42 aeroplane N242CV "Mildred" to the task of moving PPE around the UK in support of the front-line National Health Service staff. The aircraft is in the care of BAE Systems to undertake the missions.



Summit Aviation, a Greenwich AeroGroup company, has hired **Frank Reuter** as its new Director of Maintenance, replacing **John Bonnell** who is retiring after 29 years with the company. A retired Master Sergeant with the United States Army, Mr. Reuter most recently served as the Vice President of Maintenance & Engineering and Director of Maintenance for AAR Lift in Palm Bay, Florida. In his position, Mr. Reuter was responsible for the overall maintenance and quality control of the airline. Mr. Reuter served in a variety of increasingly prominent aviation positions after he left Army including roles as a Lead Rotary Wing mechanic for Black Water Aviation in Melbourne, Florida, and as the Senior Maintenance Manager for Presidential Airways also in Melbourne. He holds an Associate Degree in Applied Science in Aviation Technology from North Central Institute, a Bachelor of Science in Business Management from Grantham University and an FAA Airframe and Powerplant License. Mr. Reuter begins his duties with Summit Aviation on May 1st.

MOVE ALONG THERE

Not so long ago many start-up drone programmes in the USA were making it abundantly clear that they were the people's friends and that they were not going to use their new toys to spy on the average citizen. I am not so sure that the message coming out of Connecticut can be squared with that.

The Westport Police Department have announced that it is testing state of the art technology to help detect COVID-19 symptoms and identify social distancing. The Police Chief and the head of drones are testing new drone technology in the oddly named "Flatten the Curve Pilot Program" to combat the spread of the Coronavirus.

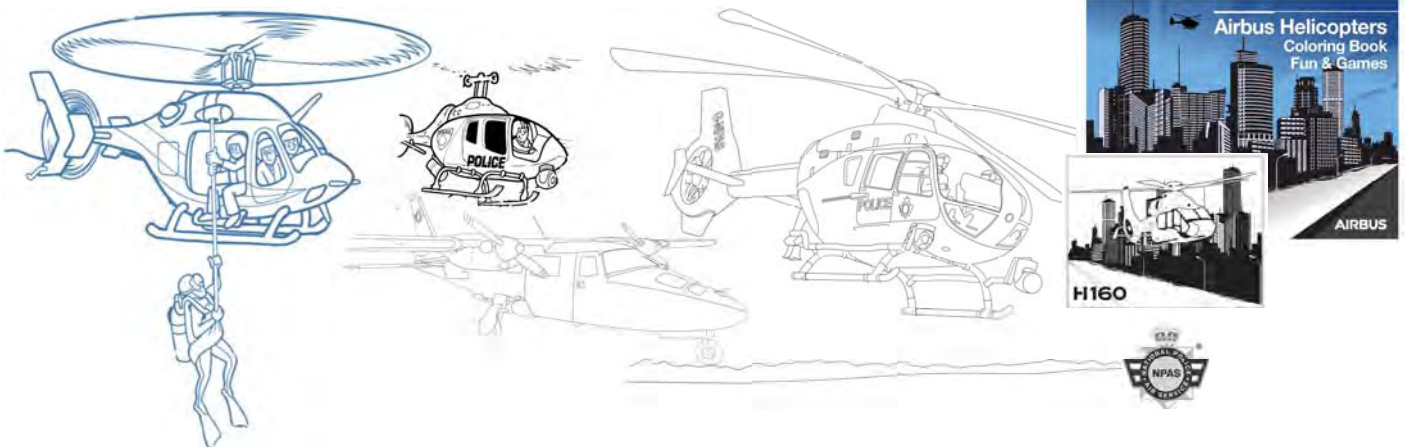
The department is partnering with drone manufacturer Draganfly as first responders are looking for effective ways to monitor social distancing, ease the spread of COVID-19 and keep their communities and personnel safe.

It is claimed that the technology may prove to be an innovative tool in helping the community practice safe social distancing, while identifying possible coronavirus and other life-threatening symptoms. The software uses biometric readings to understand population patterns and allows quicker reaction time to ongoing events or potential health threats. The goal is to provide better health monitoring support for potential at-risk groups, including seniors, as well as for gathering crowds at beaches, train stations, parks and recreation areas, and shopping centres. It will not be used in individual private yards, nor does it employ facial recognition technology.

Apparently drones provide this technology for reaching remote areas with little to no manpower. That sort of busts the assumption that drones require at least one operator. [Westport PD]

Ed: I wonder who they think they are kidding?

Airbus Helicopters and Bell have each produced excellent 'stay at home' colouring books for those hiding away. NPAS has three colouring sheets available. The manufacturers offerings are available as Free Downloads at these links. Airbus: <https://t.co/pFqjUe00TV?amp=1> Bell: <https://bell.co/eyv>



Hoversurf, a Russian urban air mobility technology company, is working on a flying drone ambulance. The company presented its improved hover bike model at the Dubai Air Show in 2019. Hoversurf uses electric fan blocks in ring fairings made using Electric Ducted Fan Technology - simply a fan, with multiple blades mounted inside a duct or shroud. They work by accelerating the air drawn into them creating thrust.

This solution allows significantly reduced weight and complexity. Where most ducted fans suffer from reduced efficiency Hoversurf is able to increase power to the level of a classic propeller; they changed the ring fairing, cutting additional air intake slots in it. Thanks to the Venturi effect, the efficiency has risen to an acceptable level.



NOT COMING TOO SOON

Are there any shows and events to fit in our diaries?

Probably not. I am surprised that APSA still has thoughts it might still be running the Annual Conference & Exposition in mid-July. The event, the 50th in the series, is set for Houston, Texas in mid-July. This is an International event so I seriously doubt that the current situation will allow it to attract any non-Americans. If any of the worlds politicians are to be believed most countries look unlikely to allow free passage until an antidote is freely available.

Further, and in the same thought process, a question might be raised about the international content of next year's Heli-Expo.

Nonetheless, planning must take place in the hope and belief that we will not have to wait until next year—especially if the expected audience is domestic. Having faced many event cancellations the Nineteen Group has reset late September for a series of its April UK events and co-located them all at the National Exhibition Centre [NEC] Birmingham alongside its Emergency Services Show. Now the four co-located events - The Security Event, The Fire Safety Event, The Health and Safety Event and The Facilities Event are to move to the 22-23 September 2020. All four events had already reached twice the size of last year and been receiving record-breaking pre-registration numbers, but the market has to settle and deal with unprecedented circumstances.

Free-of-charge passes now offer access to 5 industry leading events.

The Emergency Services Show: <https://www.emergencyuk.com/>

The Security Event: <https://www.thesecurityevent.co.uk/welcome>

The Fire Safety Event: <https://www.firesafetyevent.com/>

The Health & Safety Event: <https://www.healthandsafetyevent.com/welcome>

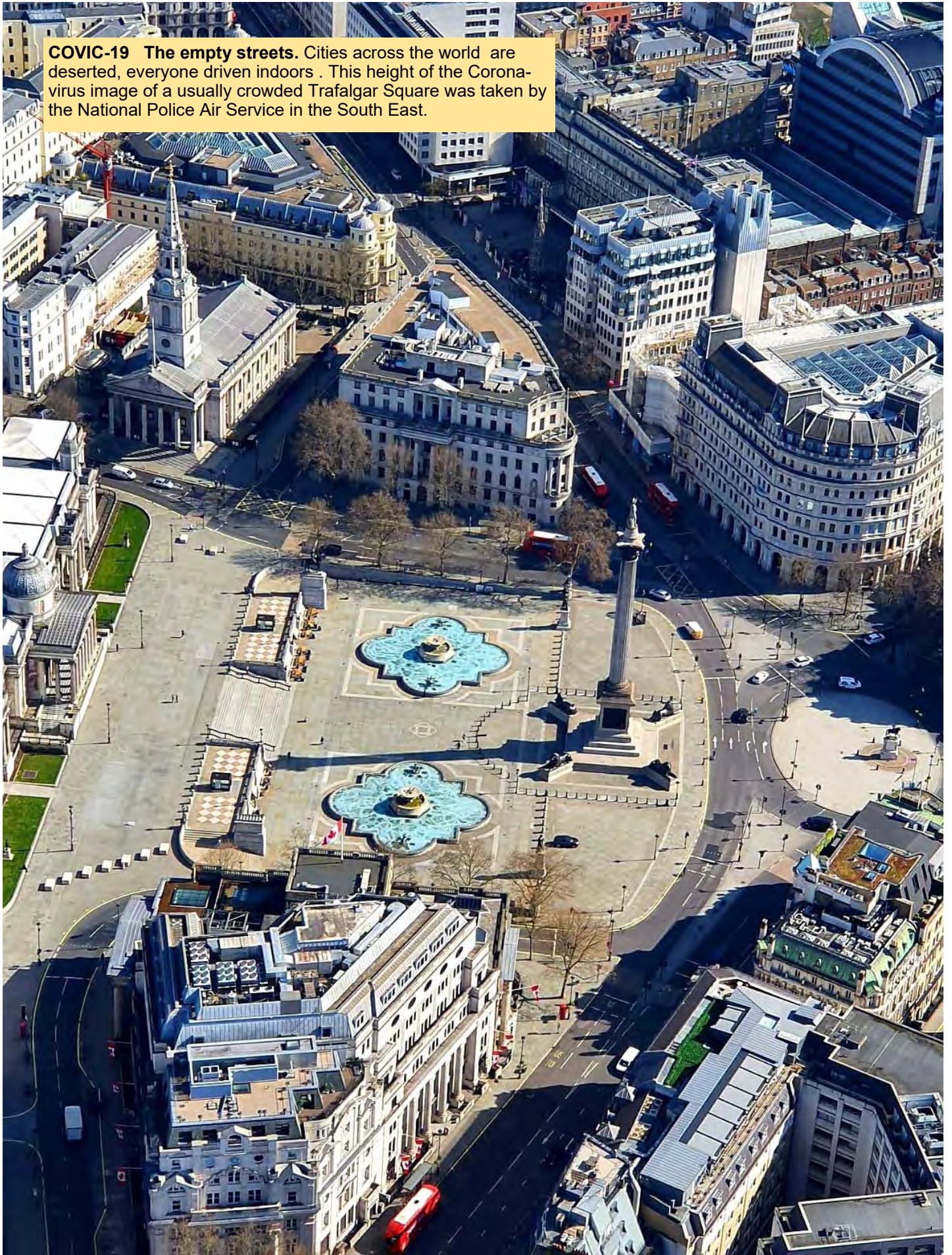
The Facilities Event: <https://www.facilitiesevent.co.uk/>

Free of charge parking is available for attendees registered for these events.

10-12 November 2020 European Rotors - *The VTOL Show and Safety Conference* to be held in Cologne, Germany. The European Helicopter Association (EHA) and the European Union Aviation Safety Agency (EASA) have launched a new annual conference and trade show held in an inside venue in the City of Cologne. The event has secured the backing of the major helicopter manufacturers, Airbus Helicopters, Bell and Leonardo and negotiations continue to provide other content at this new venue. Police Aviation Research will be backing this event with marketing and, subject to the progress of the Coronavirus, hopes to be able to provide content for the event. www.europeanrotors.eu



COVID-19 The empty streets. Cities across the world are deserted, everyone driven indoors. This height of the Corona-virus image of a usually crowded Trafalgar Square was taken by the National Police Air Service in the South East.



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