

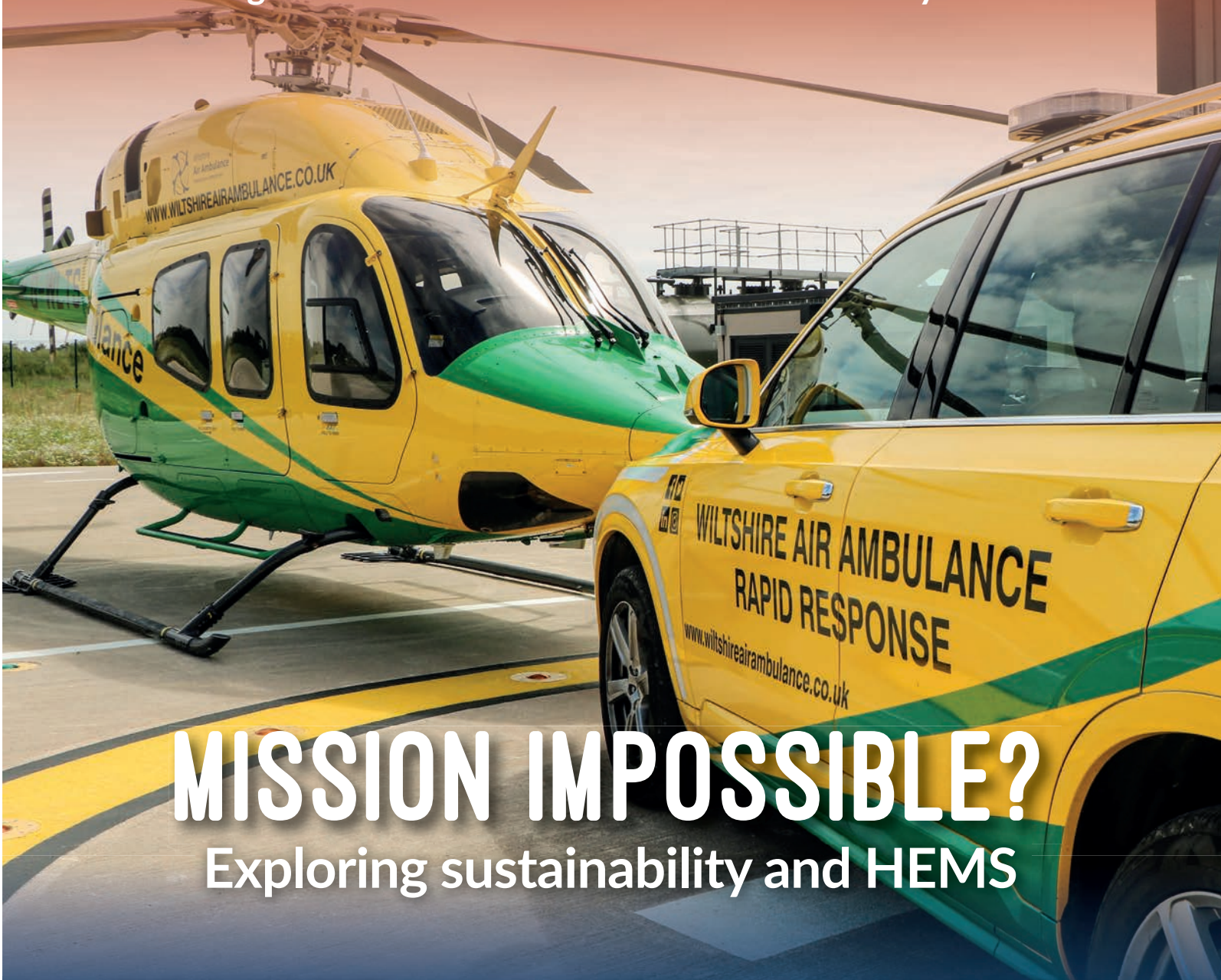


AIR AMBULANCES UK
SUPPORTING AIR AMBULANCE CHARITIES

ISSUE 34 AUTUMN/WINTER 2021

airway

The magazine for the air ambulance community



MISSION IMPOSSIBLE?

Exploring sustainability and HEMS

THE SAME BUT DIFFERENT

HEMS in the devolved nations

A LASTING IMPACT

How Covid has reshaped charities

WHOLE BLOOD TRIAL

Three-year study begins

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FROM THE EDITOR

With COP26 all over the news recently, it feels like the right time for air ambulance charities and all the industries that support them to tackle the sustainability issue head-on. Helicopters use around 250 litres of fuel an hour and with the use-by date for fossil fuels coming ever closer (albeit changing according to global governments' latest whims), it is time to ask out loud, 'What next?'

In our cover feature this issue, we explore that very question and find out that at the moment, it is a question that largely produces further questions rather than answers. However, the article also reveals that sustainability in our sector goes far beyond how we fuel the next generation of helicopters. It is fascinating to learn how sustainability reaches into every single facet of an organisation and there is much food for thought.

Another important issue that will have a more immediate impact on HEMS services is that of how best to use blood in the PHEM environment for the resuscitation of patients with life-threatening haemorrhage. On page 4, Dr Laura Green tells us more about an important trial looking at the benefits and cost-effectiveness of transfusing whole blood; the trial has several air ambulance charities involved and could have significant implications for all.

AAUK's new five-year strategy sets out a positive future for all air ambulance charities and we take a look at this on pages 6-7. The Strategy contains bold and definitive steps designed to move the organisation forward and further enhance the useful, practical, tangible support it offers members.

We take a look on page 8 at what brings the devolved nations together when it comes to their air ambulance charities and also where their challenges diverge from the rest of the UK. It's fair to say that Wales, Scotland and Northern Ireland are resounding success stories, each operating in sync with their very different environments, geography and demographics.

It was good to hear from HM Coastguard on the important relationship between UKSAR and air ambulance services (p20) and you can read about another crucial piece of the air ambulance jigsaw – helipads – on page 16. I was shocked to learn how invisible helipads are to planners.

Two geographically and demographically distinct AAUK members tell us about their response to Covid (pages 18-19), while we hear about more missions in our ever-popular Patient Stories pages (p14).

With an online Conference just finished and an online Awards coming up - and a plan to return to in-person events for both in 2022 - let's hope that this winter is the final period to be dominated by Covid.

I hope you enjoy the issue.



Nick Campion,
Editor

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Forthcoming events

3 December 2021	AAUK Awards of Excellence online.
5-11 September 2022	Air Ambulance Week.
14 November 2022	National Conference and Awards of Excellence Edgbaston Stadium, Birmingham.

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THREE-YEAR BLOOD TRIAL TO BEGIN

Every year, uncontrolled bleeding due to major trauma accounts for 4,500 deaths in England. Around 20% of deaths occur in the first 24 hours and 40% within 30 days. Blood transfusion is a life-saving treatment for bleeding patients, and any delay to starting transfusion can reduce a patient's chances of survival.

So far, so straightforward. However, as medics reading this will know, there is uncertainty around the most effective way to deliver blood. Dr Laura Green (Consultant in Haemostasis and Transfusion Medicine at NHS Blood & Transplant and Barts Health NHS Trust), Professor Jason Smith (Defence Professor and Consultant in Emergency Medicine at University Hospitals Plymouth) and other Emergency Medicine and Blood Transfusion doctors are working with a number of air ambulance services and other stakeholders to clarify the most effective way of using blood for the resuscitation of patients with life-threatening haemorrhage.

Blood transfusion is delivered through different blood components, namely red blood cells (RBC), important for carrying oxygen around the body; plasma, which contains essential proteins to help blood clot; and platelets, small cells that are important for blood clot formation. All these components are derived from whole blood donation and are stored separately at different temperatures.

In the UK, pre-hospital patients are typically transfused with a combination of RBC and plasma. Platelets are stored differently to other components and are more difficult to carry on air ambulances, so are only given after arrival at hospital. However, carrying separate components introduces logistical challenges due to additional weight that the team needs to carry; increased complexity in resuscitating patients, as several bags need to be given to patients who may not have enough intravenous access; and potential delay in transferring patients to hospital.

Transfusing whole blood instead could overcome these logistical challenges and could improve survival.

However, although there is some evidence of the benefit of using whole blood, the benefits and cost effectiveness of whole blood transfusion against standard care in NHS has not been evaluated. Dr Green's three-year trial aims to assess if whole blood transfusion is better than current standard care in improving survival for patients with life-threatening bleeding in the pre-hospital environment.

Dr Green explains: "There has been a whole process up to this point to assess if we can manufacture whole blood for the NHS. We had to evaluate new filters that filtered out injurious elements – such as vCJD – while retaining platelets, which the previous filtering process had not been able to achieve. Data from the new filtering process show that we can manufacture whole blood for the NHS, which can now be tested in future trials.

"So now we need to do a Randomised Controlled Trial to assess once and for all if using whole blood in the pre-hospital environment is better than what patients receive at the moment. We have contacted the air ambulance services in this country, all of whom were keen for this to happen. Some were willing to help part-fund



the trial and recruit patients into the study.

"We met recently to discuss the trial, to work on protocols and to consider how we would secure the remaining part of the funding we need in addition to that already committed by NHS Blood and Transplant and the Ministry of Defence.

"This has to be a pragmatic study that can quickly be moved into standard care if it shows a benefit. There will be confounding factors to address – such as the fact that air ambulances sometimes give blood to patients in traumatic cardiac arrest, of whom around 90% will die – but we hope that we will be able to conclude in three years' time that we have a solid, evidence-based standard of practice around blood transfusion.

"I feel optimistic for the trial because the air ambulance community has such a great mindset around evidence-based medicine and doing everything they can to reach the best results for their patients. There will undoubtedly be challenges along the way, but I know I'll enjoy working with this sector on this important trial."

Dr Green expects to recruit around 850 participants to the trial, which will last three years.

AAUK CONFERENCE GOES ONLINE

Following the success of last year's Webinar Week, this year's national conference, sponsored by BMW, was held virtually from Monday 8 to Friday 12 November.

The free Conference attracted some outstanding speakers and was designed to allow air ambulance staff to pick and choose sessions of interest to them without having to commit to full days of talks. The Conference was very popular, attracting nearly 450 registrations for sessions across the week.

Sessions included:

- The Sustainable Future of HEMS with Airbus, Leonardo, GAMA Aviation and BHA

- The Sustainable Future of Rapid Response Vehicles with BMW
- The Pathophysiology of Cardiac Arrest and Emerging Technologies with Prof Charles Deakin
- The Importance of Peer Support with MIND
- Creating a National Pre-hospital Patient Clinical Audit with Dr Phil Hyde
- Gerald Oppenheim, CEO, Fundraising Regulator on the organisation's role
- Transforming your Website and Social with Young Minds
- The near future of prehospital trauma care with Professor Karim Brohi



REWARDING PARTNERSHIP

Air Ambulances UK and Virgin Red, Virgin's new rewards club, have announced a new partnership. Virgin Red is a rewards programme that allows members to earn and spend across five different reward categories, including Points for Good. With AAUK now one of just five charities in the Points for Good section, Virgin Red members can choose to donate one thousand Virgin Points or more to AAUK at the click of a button.

Charlotte Sjoberg, Corporate Affairs Director at Virgin Red, comments: "We are thrilled to welcome Air Ambulances UK into our Points for Good category at Virgin Red. We hope that being part of the Virgin Red family will continue to raise awareness and donations to support the crucial lifesaving service air ambulances provide across the UK – a service that any one of us could need at any time."

UKATTS CHOOSES AAUK

UKATTS, the travel club for Air Traffic Control staff has selected AAUK as its chosen charity. Kevin Day of UKATTS said: "Throughout its 38-year history, the members of the UK Air Traffic Controllers Travel Section have worked closely with the airborne emergency services to help deliver rapid responses to challenging situations in times of greatest need. With our connection it seems only fitting that Air Ambulances UK should become our chosen charity; we continue to recognise and admire the skill and dedication of their teams in helping to save lives."

HUGE REACH FOR AIR AMBULANCE WEEK



AAUK was delighted to see a highly successful Air Ambulance Week 2021. With a primary objective of raising awareness of the air ambulance charities and their work, AAUK and 18 air ambulance charity participants put patient stories at the heart of their campaigns.

With a focus on digital and media, the campaign revolved around 'Every Second Counts, Every Penny Matters'. Air Ambulance Week achieved nearly 400 pieces of media coverage across print, online and broadcast and reached over 35m across social media. There was coverage across national media such as the Daily Mail, The Mirror, Times Radio and BBC News 24, and also local media.

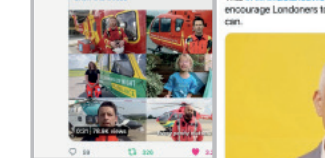
AAUK was able to engage royal support for Air Ambulance Week, with social media support from HRH The Duke and Duchess of Cambridge, and the Week also featured as the Royal Family's Charity Tuesday Instagram story.

Further support was garnered from the Department of Health and Social Care, the Minister of State for Health and many local MPs thanks to proactive local charity engagement. Other celebrity support included Dr Hilary Jones, Sarah Jarvis, Emma Kenny, Carol Smillie and Rav Wilding.

Members who took part agreed that it had been an excellent campaign and a significant step up from last year. The AAUK team is already thinking about Air Ambulance Week 2022.



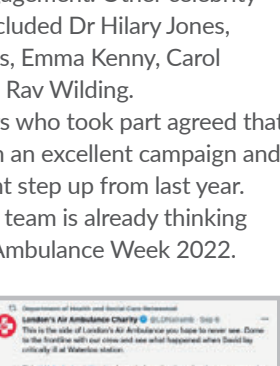
The Duke and Duchess of Cambridge @dorwings... Sep 8
This week is @airambulancesuk @airambulancesuk, raising awareness of the vital work of an ambulance charity in rapidly delivering lifesaving pre-hospital care to people with a medical emergency.
Thank you to all involved for your tireless efforts in helping to save lives.



Mayor of London, Sadiq Khan @SadiqKhan Sep 8
The incredible @LDHambro delivers rapid response medical care to save lives all over our city.
This #AirAmbulanceWeek I want to say thank you, and encourage Londoners to support them in any way they can.



Dr Hilary Jones MBE @DrHilaryJones Sep 10
When the unthinkable happens London's Air Ambulance can be at the scene of an incident within minutes. David's powerful story shows the extraordinary care they provide. The proud to support Air Ambulance Week and @LDHambro, thank you for looking after London.
#AirAmbulanceWeek



FIVE-YEAR STRATEGY DEFINES AAUK'S GOALS

AAUK has released its five-year strategy, *Saving More Lives Together 2021-2025*, which focuses on using innovation and collaboration in the drive to save even more lives in the pre-hospital care environment. The strategy has been developed following a period of research, planning and in-depth consultation with AAUK members.

At the heart of the strategy are the five strategic goals that AAUK aims to meet in the coming five years.

Simmy Akhtar, CEO of AAUK, comments: *"The consultation we undertook before creating this strategy was critical because it allowed us to shape the strategy to meet the needs of all of our stakeholders. Our consultees asked us to be the recognised, credible and trusted voice that united the sector, to represent the sector to government and peer organisations and influence strategic change. On the charity side, it was clear our mandate was to exploit national fundraising opportunities that regional charities can't reach*

and to raise the sector's profile while communicating its key messages."

The ultimate ambition of the strategy is to enable AAUK to fulfil its vision of working with the air ambulance sector; the vision says: *"Together we will ensure the best possible chance of survival and patient outcome for everyone in need of lifesaving pre-hospital care."*

The first initiatives AAUK is undertaking under the auspices of the new Strategy are the Innovation Grant Fund and Strategic Innovation Committees. These are illustrated in the images below. The Innovation Grant



Fund enables AAUK to better meet Charity Commission requirements and to make better use of donor funds for greater impact for beneficiaries and their patients. Linked to the Innovation Grant Fund, the Strategic Innovation

Committees will be highly collaborative groups focused on the research and development around projects identified as priorities for the sector.



OUR VISION

Together we will ensure the **best possible chance of survival** and **patient outcome** for **everyone** in need of **lifesaving pre-hospital care**

OUR PURPOSE

Champion, support and **represent** the **vital work** of **air ambulance charities** enabling them to **save even more lives** and **improve patient outcomes** every day across the UK

'PRIDE' IN EMERGENCY CARE

By Aysha Mendes, Editor, JPP

Awareness of the healthcare disparities experienced by marginalised communities is encouragingly on the rise in recent years. Whether as a result of a person's socioeconomic status or their race, issues are being identified with access to healthcare, increased health risk and discriminatory treatment. However, as Pride celebrations took place this summer around the world, it seems fitting to note that very little conversation takes place around the health and healthcare of people belonging to lesbian, gay, bisexual, transsexual, queer or questioning and other sexual identities (LGBTQ+).

It is known that LGBTQ+ people experience disproportionately poorer care and health outcomes (NHS, 2021) including worse cardiovascular health (Caceres et al, 2020) and even factors which may result in higher vulnerability to COVID-19 (LGBT Foundation, 2020). Unfortunately, cardiovascular risk and many others aspects of health receive little attention in LGBTQ+ populations compared with topics such as HIV and substance use (Caceres et al, 2020). However, evidence shows that adults within these communities have worse cardiovascular health relative to cisgender heterosexual people (Caceres et al, 2020).

For instance, transgender women on gender-affirming hormone therapy experience higher incident myocardial infarction, venous thromboembolism, ischaemic stroke and cardiovascular mortality than cisgender individuals (Caceres et al 2020). This is just one example but various risks and barriers exist within each of these individual subgroups, too complex and numerous to delve into here, and all of which require further attention, research and the subsequent development of culturally appropriate resources, training, interventions and care.

It has been shown that the cardiovascular health of LGBTQ+ adults is compromised by significant psychosocial stressors throughout the life span (Caceres et al, 2020). Discrimination is relatively and unacceptably common, including from health professionals, which can further discourage people within each of these communities from seeking healthcare when symptoms may arise.

Each of us naturally holds our own belief systems and values. However, health professionals must not only receive training and support to providing holistic, equal and culturally appropriate care to their LGBTQ+ patients, but they need also become aware of their own beliefs and potential biases in order that these do not inadvertently become barriers to equitable care provision. Furthermore, health professionals may belong to any one of these communities, and may themselves be subject to homophobic or transphobic discrimination from colleagues or patients, or may fear this and therefore keep their sexual identities to themselves.

No person should feel afraid to seek out healthcare and no person should feel uncomfortable going to work or revealing who they are for fear of ill-treatment because of their sexual identity. It is incumbent on each of us to see one another as human beings first, and to treat one another with due respect.

Share your experiences with the JPP at jpp@markallengroup.com and access your subscription discount exclusively for AAA members at <https://www.magsubscriptions.com/aaa25>

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THE SAME BUT DIFFERENT

UNDERSTANDING THE AIR AMBULANCE CHARITIES OF THE DEVOLVED NATIONS

All air ambulances walk the tightrope of needing to engage with Government in order to help influence the clinical landscape in which they operate but also remain independent of Government so they can remain agile, focused and driven by the needs of patients and communities, not by politics. This tightrope is an even trickier one to navigate for the devolved nations' air ambulance charities, and is one of the many ways that these particular charities navigate unique circumstances alongside many very familiar ones.



Sue Barnes

Sue Barnes, Chief Executive of Wales Air Ambulance since December 2020,, says, *"Being the air ambulance for a devolved nation and being a fundamental part of the nation's critical care landscape means we find ourselves firmly a part of the political environment. We are aware of the fine balance needed between maintaining our independence but also retaining our seat at the table. Being the only air ambulance organisation means it is*

easier to establish relationships and ensure our voice is heard at the Senedd. Westminster is relevant too of course and we're grateful for the work AAUK does with the UK Government."

All devolved nations' air ambulance charities are well supported through fundraising and are aware that fundraising schemes work best when they appeal to the local audience. Sue Barnes explains: *"We do lots of research to underpin our fundraising strategy and one of the most important and consistent findings is our fundraisers' real pride in the country and in what we are doing for the community, so*

fundraising definitely has a very Welsh focus. This connection to our community has also informed our recent decisions around keeping retail outlets open: it would have been easier to perhaps give up during the pandemic but these outlets are worth far more than what the balance sheet shows – they are a window into our communities. The community visibility and relationships they help build also have an important impact on people becoming involved in other fundraising, including legacies."

Air Ambulance Northern Ireland (AANI) officially began operations in 2017 and is getting busier and busier. It too has an excellent relationship with its Government, the Northern Ireland Executive, and was also grateful to the UK Government for the LIBOR grant money that helped the organisation to get up and running. They too are the only air ambulance in the area so have become a real focus for the community and their fundraising.

"We have to work hard for our income," says Breige Mulholland, Head of Operations and Finance, AANI. *"It takes time to build up a following, and even longer to establish consistent giving from legacies but we are helped by our small but brilliant team of volunteers who are experts in the organisation. We do have some fundraising challenges that are unique to us, including working within archaic gambling legislation that prohibits selling electronic lottery tickets."*





David Craig

For Scotland's Charity Air Ambulance (SCAA), it has been eight years since inception and the progress has been nothing short of remarkable, says David Craig, who has been CEO for the last six years: "When I joined we were raising £1.5 million a year and that has increased by 400%. This has helped us increase operational hours from 10 to 12, launch a second aircraft, develop a new base, upgrade the aircraft and increase

staff from 5 to 15. Our volunteer numbers have doubled and we have a huge social media reach. In all, we've raised nearly £40 million in eight years and responded to 3,500 incidents.

"We have learned from so many of our colleagues across the UK. We spoke to them before we started up – and in turn were able to pass on some of what we'd learned to Air Ambulance Northern Ireland as they went through a similar process. The sharing of knowledge in this sector is fantastic – it's very healthy how open people are to share information and ideas to continually enhance services. One of the few upsides of the last 12 months has been those working relationships becoming even closer.

"The other upside of the pandemic has been the reminder of the value of having the right people working for you. We have a great team, each of whom plays a critical part in what we do."

Breige Mulholland from AANI agrees about the rare upside of the pandemic: "The way AAUK was able to pull everyone together online during the pandemic was incredibly helpful and we've been able to grow our relationships with a number of other air ambulance services similar to our own. We've been able to share knowledge and really appreciate learning from others who have been there before – for example regarding our plans for building a new base.

"We've had a really strong link to Scotland and really valued their input based on their recent experience of starting and growing a brand new air ambulance charity. Our trustees remain incredibly supportive and engaged, very hands-on, and the Northern Ireland Executive have offered great support, both financial and otherwise. It really needs so many different people and organisations pulling together to create this kind of success."

Wales Air Ambulance's most significant moment was in 2015 when it went into partnership with the Emergency Medical




Retrieval and Transfer Service (EMRTS) Cymru, which provides consultant and critical care practitioner-delivered pre-hospital critical care across Wales. It is a partnership between Wales Air Ambulance Charity, the Welsh Government and NHS Wales. WAA became a 24/7 operation in December 2020. Sue Barnes comments: "There are many things that all air ambulances have in common and it's incredibly helpful to share those with colleagues from across the UK but there are things like our partnership with EMRTS and our relationships with both the Senedd and NHS Wales that are unique to us.

"My role now is to focus on the next 20 years and devise our strategy accordingly. It will be important to diversify income streams, focus on sustainability, maintain our strong connection with the people of Wales – including through bilingualism and reaching out to both urban and rural populations, make best use of data, and to engage more young people both as a source of income and volunteers. We need to understand that young people may engage in different ways now, and we must be agile enough to respond to that."

"The way AAUK was able to pull everyone together online during the pandemic was incredibly helpful and we've been able to grow our relationships with a number of other air ambulance services similar to our own."

Breige Mulholland, AANI

 Photos supplied by AANI, SCAA, WAA.



HEMS TACKLES HUGE SUSTAINABILITY CHALLENGE

Only the most determined hermit could have avoided all the publicity about the 2021 United Nations Climate Change Conference, also known as COP26, which was held in Glasgow this year. As you read this, the world should be coming together to commit to bold and ambitious projects and targets designed to mitigate the impact of climate change.

But where do air ambulance operations fit into this picture? Helicopters and rapid response vehicles are being tasked almost every hour of every day and all run on fossil fuels. Charities have bases that need heating and lighting, staff who need to get to work, equipment that needs making in factories and so on. This is a live question for many organisations in the air ambulance sector, as we explore below.



Duncan Daines

Helicopters use around 250 litres of fuel an hour, so with fossil fuels due to be phased out in the UK, manufacturers, operators and end users are facing up to one of the sector's biggest challenges. Duncan Daines, Strategy & Special Projects at Gama Aviation, sets the scene: "As a company we have been holding a series of internal discussions regarding the challenges surrounding

CO₂, NO₂ and noise. We're asking questions like: What does carbon mitigation mean for the sector? When will suitable replacement fuel /engine technologies be available at scale? What considerations will the sector experience when considering fleet replacements? How will that work with fundraising, particularly as incoming technologies are likely to increase operational costs for no apparent net gain in the success of the medical mission?

"Then we have to think about who owns the CO₂: the operator? The charity? The OEM? The engine provider? The fuel provider? Carbon mitigation certification can't be owned by all of them yet they share the burden of responsibility to move to a low carbon future."

Duncan then summarises the current position around the technology that exists that may be the solution, or part of the solution, to the issue: "There are four main areas to consider:

- **Maximising efficiencies in the current system:** can CO₂ & NO₂ be reduced within the confines of the current system? The nature of critical 'go now' missions may often prevent this but considerations such as the optimisation of tasks between aviation and ground assets, or improvements in routings, may provide marginal gains in CO₂ reduction. We should collectively approach this with a kaizen philosophy using offset only when further reductions can't be achieved.
- **Sustainable aviation fuel (SAF):** this is substantially more expensive than the current fuel used in helicopters. In its current form it is supplied as a blended product, usually to 35%; however there is limited supply and so availability is poor. Fuel providers need the airlines to adopt the fuel to generate the scale needed to reduce the cost and increase availability. However, the pandemic has reduced the number of airline flights so it presents a 'catch 22' situation.
- **Electric:** this may have promise but from a technical point of view, range and MTOW (Maximum Take-off Weight) are severely limited which in turn limits the medical concept of operation; therefore the current breed of aircraft from the likes of Lilium and Joby are currently a long way from any real-world practicality to replace / augment the capability of say, an Airbus H145 D3.
- **Hydrogen:** various tests are happening around Europe but once again there are no immediate silver bullets arising from this technology.





"My view is that we are all at a transitionary point. SAF offers a bridge but it doesn't resolve the problem, which may require a far more radical solution. In the meantime what we are left with is the obvious need to reduce where we can, offset where we need to and support emerging technologies wherever we can."

"It's a very complex problem that creates its own inertia, however I believe it is the responsibility of every single one of us in this sector to address the challenge and move us proactively toward low-carbon missions."

Duncan Daines, Gama Aviation



Natalie Bush

Natalie Bush, Chief Operations Officer, Specialist Aviation Services, says that OEMs have a huge part to play – and they have already drawn up strategies to address the issue. However, she says that people perhaps don't realise just how massive a change the move away from fossil fuels will be. She explains: "The most likely way forward is electric but these aircraft would be very

heavy thanks to the batteries and performance would change significantly. There are biofuels but these would need heavy OEM

backing, and the fact is they're controversial – should we be cutting down forests for biofuel? Realistically, it's at least 15 years until we'll have a product that HEMS can reliably use – possibly more. So until that point we must optimise the current platform.

"OEMs and helicopter operators must work together to make helicopters more efficient: for example, if they're capable of doing back-to-back missions, you cut out excess flights back to base for fuel. Training could be done primarily in simulators; we can reconsider positioning of aircraft and reserve aircraft; charities can continue to look at stand-downs because every one of them costs; we must continue to look at flight efficiency – what is the most efficient speed and height to be flying when not on a mission, and so on."



Helena Holt

Helena Holt, CEO of at Devon Air Ambulance Trust (DAAT), agrees that there are always opportunities to make operating the aircraft more efficient, with reducing stand-downs a critical step in cutting wasted journeys, in turn reducing fuel use and maintenance, which is based on hours flown. However, stand-downs are an inevitable part of operating an emergency service, so DAAT's current

low rate of around 20% will be difficult to trim down further without risking patients' lives. For an air ambulance charity, however, she says sustainability is about far more than just which fuel an aircraft uses: "A number of years ago, the climate change emergency went on to our Risk Register, with the full backing of our Board. It's incredibly important to our supporters, our community, and the world so we have a duty to do all we can.



Sustainability is now one of our four key strategic focus areas to ensure we are fit for the future – it is built into all aspects of planning and decision-making.

“As a result, we have switched utilities to a Net Zero supplier, ensured our retail outlets run sustainably, increased the use of electric or hybrid vehicles, moved our I.T. to the Cloud so our energy-hungry servers (and air conditioning) have gone, reduced the number of mobile phones by switching to Teams call plans, have PV panels and air source heat pumps at our base and so on. Every contribution matters.

“We now face some interesting ethical dilemmas. For example, we operate in a largely rural area and have fantastic support from the agricultural community but have received complaints about accepting funds from tractor runs and beef farmers. Is it still right to take that money to save lives? Similarly with motorbike rideouts – they are incredibly positive for awareness, promoting safe riding and fundraising but is this cancelled out by fuel use? We’re at the start of a journey and don’t have all the answers!

“Since Covid started, we have had more staff working at home, which has cut commuting miles considerably – a positive effect. But then what we haven’t yet measured is do those people heating and lighting their own homes, using their own printers and computers etc have more of an impact than everyone being in the same energy-efficient office space? And then there’s all the Covid PPE...”

For Natalie Bush, the considerations around sustainability also go far further than the aircraft themselves: *“We have to look at every single aspect of designing, manufacturing, flying and decommissioning an aircraft. We need to take control of the supply chain and how we keep the helicopter in the air, where we hold helicopters, where we hold spares – for example, we now hold a certain amount of spares in key places, not just at HQ.*

“Then what about the platforms that are coming to the end of their useful HEMS service life but have viable parts? How do we recycle helicopters? Serviceable parts can be used again or overhauled to become serviceable; or if they can’t, there may be other ways to use them – or as a last resort, scrap for recycling. You might be surprised by how much can be returned to use – units are so expensive that the industry already knows the importance of reusing and recycling.



“Every company, every employee, every team must consider the environment as part of their day-to-day decision making and procedures. This is the first step – to get people to think about doing their jobs in a different way. Everything has to sit within an environmental framework.”

Maybe it is more realistic to see how the industry can work to maximise sustainability within the existing model, rather than expecting technological revolution in the aircraft. Gama’s Duncan Daines gives some valuable context: *“The problem is that if you add up all the fuel use of all the air ambulance services in the UK, it’s probably less than 1% of the UK’s airlines, therefore the air ambulance sector is not going to be a major influencer either in terms of legislation, stimulus or future technologies.*

“Charities and operators need to keep looking at the efficiencies of their operations. Could the way they work their patch be more efficient? Or maybe it’s time to look again at how different agencies work together, whether that’s two air ambulance charities or air ambulance charities and UKSAR. Maybe there’s some technological solutions that have not yet been explored – for example, could drones be used to locate people in remote locations before a large, expensive helicopter is sent out? Can the current medical CONOPS (Concept of Operations) be changed to reduce weight (people & equipment) without significantly changing patient outcomes?

“It’s a very complex problem that creates its own inertia, however I believe it is the responsibility of every single one of us in this sector to address the challenge and move us proactively toward low-carbon missions.”

THE CAR QUESTION

HEMS teams across the UK use Rapid Response Vehicles. With the clear focus on moving away from petrol and diesel for cars, what does this mean for manufacturers and the charities themselves?

We spoke to Andrew Buxton, National Operations Manager, Government & Authorities Division, BMW, about what changes are ahead. Andrew explains: "The UK Government will phase out the sale of new Internal Combustion Engine (ICE) only powered cars from 2030 and some Plug-in Hybrid Electric Vehicles (PHEV) by 2035. This announcement has started to shape buying decisions of new vehicles. Emergency Service vehicles have an average life span of four to five years, meaning that vehicles could be replaced twice before the new vehicle purchase rules come into force. Some organisations are starting to review their fleet policy with a view to operating vehicles through a staged transition.

"So, should air ambulance services buy new vehicles powered by EU6 Diesel with Mild Hybrid Technology (MHT), PHEVs, or full Electric Vehicles (EVs)? Air ambulance services must consider vehicles that can carry the right level of medical personnel and equipment, as well as the ability to meet repeated demands around the clock.



Andrew Buxton

"Let's consider the three main options:

- **EU6 Diesel with Mild Hybrid Technology (MHT).** The introduction of EU6 MHT allows an engine to run more smoothly by exploiting the energy recovered during braking, not only to power the electrical devices but also to generate additional power. The 48V starter generator installed in the new diesel models provides an additional 8kW / 11hp electric boost. During normal driving, this electric boost can be used to support the internal combustion engine, allowing it to reduce turbo latency. In addition, the 48V generator allows the car to shut down the engine more silently and to start it more quickly than before, improving the start-stop functionality. The BMW model currently most suited to the air ambulance role is a current generation X5 xDrive30d AC MHT with an extra high payload capability.
- **Plug-in Hybrid Electric Vehicles (PHEV).** A PHEV vehicle uses a petrol engine and electric motor working together to reduce emissions and fuel consumption without restricting range. The electric motor powers the car within certain speeds and ranges, then the conventional engine kicks in to ensure power and long-range performance remain available. New BMW eBoost technology means you can accelerate on electric power alone, reducing fuel consumption even when using the combustion engine. The BMW model most suited to this role is a current generation X5 xDrive45e AC PHEV model.
- **Electric Vehicles (EV).** An all-electric vehicle does not have a combustion engine, so does not produce emissions locally. The BMW model most suited to this role is the all-new iX xDrive40 AC EV, due to be launched in November 2021. The BMW iX xDrive40 posts a combined output of 240kW/326hp, combined electric power consumption of 22.5-19.4 kWh per 100 kilometres (62 miles), CO2 emissions of 0g/km and a range of up to 264 miles in WLTP test conditions. Payloads on EVs are typically lower than ICE and PHEV vehicles.

"Our experience is that emergency service organisations are taking a staged approach to the introduction of vehicles that undertake duties where an instant response is a mandatory requirement, with three key considerations for their vehicle replacement programme:

"Vehicle changes due now: Many organisations state that they do not have the infrastructure to be able to work with electric-only vehicles that can carry the required payload including people and equipment, cover multiple types of terrain and can be easily refuelled/recharged. Our recommendation at this point is a current generation X5 xDrive30d AC or X5 xDrive40i AC model for this duty.

"Transition phase vehicle changes: Can an air ambulance service make a vehicle change that sits between an ICE and EV solution? Yes. A current generation X5 xDrive45e AC PHEV provides a vehicle platform that can meet operational requirements and provide a transition position for your fleet. This vehicle type can be easily refuelled and recharged without the need for an ultra-fast charging station.

"Near future vehicle changes: Can an EV provide the required payload, cover multiple types of terrain and be recharged quickly? Yes - with planning and consideration for the equipment carried. An air ambulance service would firstly need to consider whether it has access to an ultra-fast charging point located either locally off-site or on-site following an investment to their charging infrastructure. The new BMW iX is a Sport Activity Vehicle of a similar size to an X5 and is due for launch in November this year."

For further information relating to BMW air ambulance vehicle platforms, please contact Andrew Buxton on 07815 373358 or email to GAAD.Enquiries@bmwgroup.com.

 Photos supplied by SAS, Gama Aviation, DAAT, BMW.

FROM THE FRONT LINE

TRANSFER SAVES NED

Seven-year-old Ned needed specialist care when he suffered a brain bleed. His mum, Abi Smith, recalls the day they will never forget, and why they are keen to support Cornwall Air Ambulance for the next patient in need:

"Ned complained of a headache at school and wasn't really feeling himself that day. He woke at 5am in agony. The ambulance arrived quickly; Ned was in and out of consciousness by then. I could tell it was serious.

"Ned was rushed to Royal Cornwall Hospital in an ambulance. By 6.30am he had been put into an induced coma. He needed to be transferred to the specialist children's hospital in Bristol for surgery.

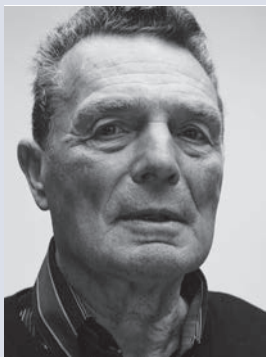
"I went in the helicopter with Ned; there was a paramedic and doctor with us. I remember looking down over Cornwall and watching everyone going about their lives, meanwhile I was there with Ned thinking we are going to lose him.

"When we arrived at the hospital, Ned was met by a team of specialists. It was utter chaos, to be faced with a room of 20 people all ready to whisk your child away. I had to sign paperwork to agree to the risks of brain surgery and watched as the lift doors closed, not knowing if I'd see him again. Ned was in surgery for most of the first day, and over the week had five surgeries to repair a faulty vein.

"Ned was in a coma in intensive care for seven days. Due to Covid-19, only one person could be at his bedside at any time, so myself and my husband had to take turns to stay with him around the clock. When we weren't with him we were looking after his younger sister, who was only five and didn't understand why she couldn't be with her brother.

"When Ned woke up from the coma he had lost lots of weight and needed speech therapy and physiotherapy. He has since made a remarkable recovery. Something like this teaches you a lot. We don't put things off and we appreciate every moment. As a family we have been inundated with kindness. We are so grateful for our friends and family.

"We will forever be grateful for Cornwall Air Ambulance's part in saving his life."



SQUASH LEADS TO CARDIAC ARREST

John Walton was an active man at 71 and was enjoying his regular game of squash with his friend, Clive Fletcher. After 35 minutes, John quickly became unwell, his breathing became laboured and his heart went into cardiac arrest. John collapsed as he went to hit the squash ball.

Clive instantly began administering CPR and called for help from the leisure centre staff. While another player called 999, staff members used the onsite defibrillator to take over from Clive's chest compressions. It took staff six minutes and three attempts to get John's heart restarted.

Two ambulances and a paramedic officer from West Midlands Ambulance Service arrived on scene, as well as a Midlands Air Ambulance Charity critical care paramedic.

In addition to the electro-cardiogram and oxygen that John was being treated with by land ambulance crews, the critical care paramedic administered glyceryl trinitrate (GTN) spray to expand John's blood vessels and aspirin to thin John's blood to increase circulation around his heart, reducing the chances of a secondary cardiac arrest.

Once John's condition had been stabilised, he was conveyed via land ambulance to New Cross Hospital, Wolverhampton. The charity's critical care paramedic escorted on-board the land ambulance in case John's heart arrested again and his enhanced clinical skills were needed.

John says: "I went from working part-time and enjoying regular squash games to spending 17 days in hospital following major surgery to my heart. I don't want to think what could have happened had it not been for Clive, the team at the leisure centre and Midlands Air Ambulance Charity."

TRIUMPH AND TRAGEDY

Former patient Minna Leatham, 20, describes how HLOWAA helped save her life:

"In November 2020, only a few hours after Hugo, my boyfriend, and I had been for a beautiful walk, we were driving along the A30 near Salisbury when we collided head on with a Range Rover at 60mph.

"It all happened so fast. I remember seeing an incredibly bright light and hearing the loudest noise I had ever heard. I started screaming in excruciating pain from my many injuries. The worst of these was my broken back, which was said by the medical team to have an 'obvious deformity'. I also had two collapsed lungs, a lacerated liver, non-functioning pancreas, broken jaw, cheekbones, ribs, wrist and other internal ruptures, breaks and haemorrhages.

"The Hampshire and Isle of Wight Air Ambulance arrived within about 15 minutes. I was taken to University Hospital Southampton and placed into an induced coma early the next morning. Had it not been for the air ambulance team, I don't think I would have survived and I certainly would have been paralysed. My injuries kept me hanging between life and death for the first few days, but thanks to the incredible air ambulance crew and the equally amazing team at University Hospital Southampton, my life was saved.

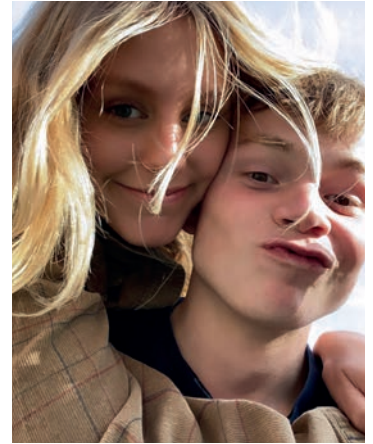
"Devastatingly, Hugo's injuries were catastrophic, but the treatment he received from the air ambulance crew meant that, because he was still alive when he reached Southampton, his family were able to be with him one last time before he passed away.

"My physical recovery has been going well. It is a slow process, one that calls for great patience from my family and me. Often it is one step forward and two steps back which can be tiring and emotional, especially when I was used to being a very active and energetic 19-year-old. Mentally it is a whole different recovery. While my nightmares have mainly stopped, I still have the waking battle of dealing with the loss of my first love Hugo.

"I am incredibly lucky to have my mother and Hugo's mother, Amanda, as part of my support system. They are incredibly strong women who have both dealt with the pain of losing a son, though 20 years apart.

"I feel so grateful to the air ambulance teams and was astonished to learn that they rely solely on donations and receive no government funding. This fired my ambition to pay them back, in any way I could, for saving my life and for giving the wonderful Yaxley family the chance to say goodbye to Hugo.

"This new perspective I have on life allows me to appreciate the smaller things more than I ever did before. I did not realise how short life can be. It has also made me so thankful for my family and friends who have supported me through this painful time. And I want to say the biggest thank you for the incredible teamwork and bravery that literally saves lives every day."



BEE RESCUE HAS STING IN THE TAIL

Saving a bumble bee from the skylight in his workshop barn proved a costly act of kindness for Clive Warren from Banff.

As he climbed up to release the trapped insect, the ladder slipped from beneath him and he crashed to the concrete floor below.

"I took one look at my leg and knew it was serious," he said. "I called my wife to ask her to phone 999, telling her not to come in until she'd done so. I didn't want her to panic until she'd made the call."

Clive's leg was a bloodied mess and after the first rush of adrenaline receded, the pain became excruciating.

"The emergency call handler was telling my wife what to do," recalled Clive. "We then heard this deafening roar outside and my wife said 'You'll never believe it, but a helicopter has just landed on our lawn."

"I've never been so relieved to see anyone in my life," said Clive. "SCAA is one of the three charities we support and they more than lived up to all my expectations."

Working with a SCAA paramedic, the team quickly assessed and stabilised Clive, and treated his pain.

"I could tell it was bad," said Clive. "The bones were sticking through the skin in two places and my ankle was distorted and twisted. By the time the team got to work, however, I was comfortable, pain free and on my way to hospital."

"Every one of them was outstanding - so professional, caring and reassuring."

Clive spent six days in hospital, undergoing several operations for a double open fracture and a dislocated ankle. He faces a long road to recovery says, "I'll be forever grateful to SCAA. The speed they got to me made a huge difference."

At 76, Clive has no intention of letting his injuries impede his enjoyment of life longer than they have to. "I want to drive again," he said. "Get back on my motorbike and also turn in a decent card at golf. I'll still be rescuing bees from the skylight but I've promised to get a fixed ladder put in place."



CAMPAIGN TO ELEVATE STATUS OF HELIPADS

AAUK is developing a strategy to help ensure helipads are at the heart of hospital developments so that air ambulance operations are not compromised.

"It is critical," says Simmy Akhtar, CEO of AAUK, "that Trusts consult air ambulance charities at the very earliest stages of hospital development plans, whether that's brand new hospitals or major refurbishments and extensions. We believe this needs to happen prior to planning applications and final building design to ensure that lifesaving operations are not compromised by poorly thought-through helipads or no helipads at all. Failure to consult could lead directly to lives being lost because for many air ambulance patients, every second really does count."

One of the fundamental challenges to overcome is that hospital helipads don't have a legal or regulatory status in the

same way that an airport does. So, while you can't get planning permission to build a block of flats at the end of an airport runway, you can get permission to build those flats near a helipad, which would totally compromise a HEMS operation.

Alan Ward, Aviation Advisor at East Anglian Air Ambulance and Chair of the British Helicopter Association Emergency Services Committee, explains: "This isn't just a theoretical risk: only recently it happened in Norwich, with a multi-storey car park being built close to Norfolk and Norwich University Hospital's helipad with the result that the larger Search and Rescue helicopters now can't land there. To build that car park, no-one had to notify the aircraft operator, the Civil Aviation Authority or anyone else. At Addenbrookes, planning permission has recently been granted for a five-storey block to be built about 100 metres away from the helipad, so now we have to look for a new location for the helipad.

"Also, construction work can spring up without consultation, so a crane might appear next to a helipad as part of some building works, and it could stop all take-offs and landings. We have no way to prevent that, other than relying on informal links with hospital infrastructure teams which, despite best intentions, can sometimes fail. The same applies for drones – while there are strict regulations about their use around airports, there are none around helipads.

"It's vital that we have some recognition of the status of helipads so we can stop this happening. This is difficult for the CAA as it means new legislation and would mean needing additional resources, but without some form of oversight the situation will not change.

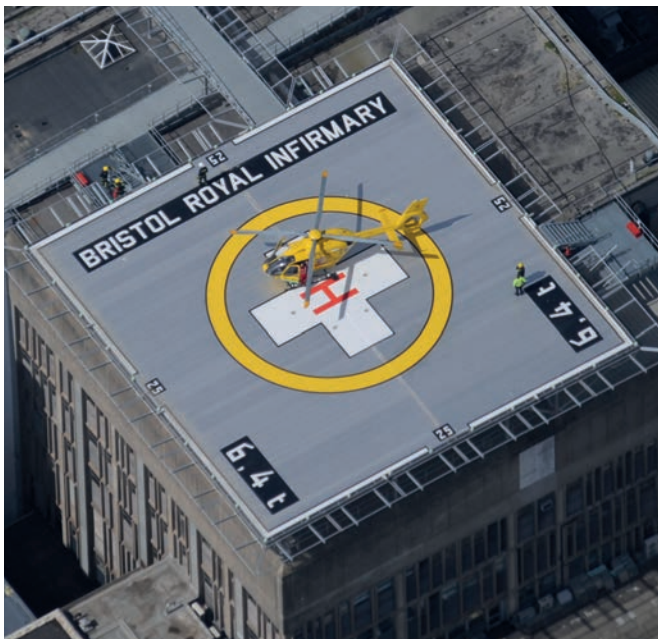
"In addition, we must be part of the conversation from the very start when new hospitals are designed – the helipad should be seen as just as integral to the building as a car park, a loading bay or an x-ray department. HEMS patients are a small part of a hospital's workload: you might have two patients a day landing on the helipad but thousands walking through the doors. But the critical nature of a HEMS patient's needs is often so much higher and having that helipad in the right place can make the difference between life and death.

"With the aircraft, the clinicians and the organisations behind them all so much more capable now, and the sector moving towards 24/7 operations in more and more areas, well placed and well-lit helipads are critical in realising the potential of the air ambulance services."

AAUK is working with a large group of stakeholders, including Search & Rescue, to lobby the relevant government and NHS departments and individuals to take the matter further.



 Image supplied by DSAA and NPAS.



"It is critical that Trusts consult air ambulance charities at the very earliest stages of hospital development plans, whether that's brand new hospitals or major refurbishments and extensions."

Simmy Akhtar, CEO of AAUK

ALL CHANGE

No fewer than four new chief executives have started at air ambulance charities across the UK, each following established and highly regarded predecessors into these most sought-after of roles.

Patrick Peal retired as CEO from East Anglian Air Ambulance (EAAA) in June after seven years in the role. EAAA's Director of Operations Matthew Jones is Patrick's successor.

Patrick played an integral part in setting up the charity over 20 years ago and was the charity's CEO from 2014. Patrick said: "Being CEO of East Anglian Air Ambulance is the best job I've ever had, but all good things must come to an end eventually. I'm extremely lucky that I've been involved with the charity from the very beginning and the transformation I've seen in what this charity can do for our patients really is outstanding."

"The teamwork and progress at EAAA, despite recent challenges, has been beyond fantastic. I am delighted that Matthew Jones will be succeeding me as CEO and have every confidence that the charity will continue to go from strength to strength in his very capable hands."

In his seven years as CEO, Patrick has seen the number of missions rise from 1,700 a year to 2,700 a year; and funds raised going from £8 million annually to over £14 million annually.

Matthew Jones commented: "It's a huge honour to lead this fantastic organisation into the future and I will do my very best to carry on the remarkable work that Patrick has started."

Richard Corbett started as Hampshire and Isle of Wight Air Ambulance's (HIOWAA) new Chief Executive on 1 September. He took over from Acting Chief Executive Sherie Williams Ellen, who resumed her role as Deputy CEO.

An experienced leader in the charity sector, Richard has specialised in humanitarian aid, for eight years at Oxfam GB and recently at Care International UK. He was Humanitarian Lead in

both organisations, maintaining oversight of emergency responses around the world.

Richard said, "I have admired the lifesaving role of air ambulance charities for many years, in particular during the Coronavirus pandemic. It is, therefore, a real honour to be asked to lead Hampshire and Isle of Wight Air Ambulance."

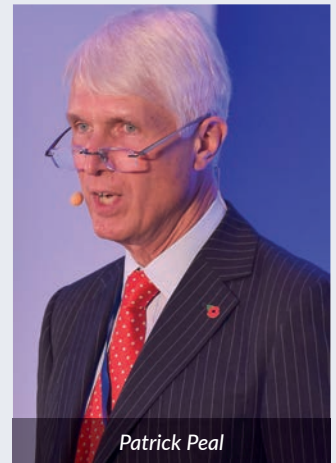
Cornwall Air Ambulance Trust has appointed Tim Bunting as its new Chief Executive. Tim most recently worked for BBC Children in Need and has previously held senior fundraising roles with a number of leading charities in the South West.

Tim said: "As someone who lives in Cornwall with my family, I know just how vital Cornwall Air Ambulance is to everyone who lives in or visits Cornwall or the Isles of Scilly."

Finally, Great North Air Ambulance Service (GNAAS) has appointed David Stockton to the role of Chief Executive. David said: "Whether it's third sector, public sector or private sector, it's all about getting results through people, aligning our energy and focus, and working efficiently."

"I'm inspired by the work of the air ambulance, and through my interests in motorsport I know just how vital it is. In the short time I've been at GNAAS I've also been inspired by the talent and passion that already exists within the charity. I'm proud and honoured to be here."

David takes over from the charity's founder Grahame Pickering MBE.



Patrick Peal



Matthew Jones

EAAA'S PHEM FOCUS

EAAA is shining a spotlight on clinical research by holding the charity's first dedicated online PHEM research and development conference.

Open to everyone, the focus will be 'breaking barriers' and how using data sets can improve collaboration and patient outcomes across the sector. It takes place online on Friday 19 November and is free to attend.

Highlights will include national keynote speakers presenting current PHEM research topics of interest, such as blood, point of care ultrasound and rapid sequence intubation.

Dr Rob Major said: "The RAID conference will be a really important way to showcase what we're doing at EAAA, what we've learnt so far and to highlight why we believe PHEM evaluation, research and development is so important. Not only does this type of R&D help to evidence the impact of air ambulance teams, but we're also identifying new ways in which we can continually improve the level of care we can provide pre-hospital to improve patient outcomes."

Register for the conference here: www.eaaa.org.uk/raidconference.

DAVID WELCH WINS NATIONAL AWARD

David Welch, CEO of Air Ambulance Kent Surrey Sussex (KSS), has won the Charity Times Charity Leader of the Year Award 2021. This prestigious national award celebrates excellence amongst charities and not for profit organisations across the UK. Since joining the charity in 2019, David, who is also an AAUK Trustee, has been an inspiring leader to a highly skilled, diverse, multi-disciplinary team of 135 staff including doctors, paramedics, dispatchers, pilots, fundraisers, marketers and support staff, and 170 volunteers. Over the last year, KSS overcame significant challenges under David's leadership and was able to operate 24/7 throughout the pandemic, without dropping a single shift. David comments: "I am honoured and immensely proud to have won this award which reflects the outstanding achievements of KSS over the last year."



David Welch

£29K FOR AAUK

A biker who spent five days in a coma following a horrific motocross accident last year got back on two wheels to raise £29,000 for AAUK. Jack Drogan, 30, took on the National Three Peaks Challenge and cycled the 500 miles between each mountain - all within five days. Last August he was fighting for his life after a motocross bike landed on him while he competed at the Hawkstone Park circuit in Shropshire.

THE LASTING IMPACT OF COVID

IN THE Spring of 2020, a hastily-written 'Stop Press' note from the editor was the first time Airway had mentioned the words 'coronavirus' or 'Covid 19'. In a year and a half, the landscape has changed dramatically and, in some ways, irrevocably. In our Autumn issue one year ago, we explored in depth how different organisations in our sector were pulling together in an incredible display of collaboration and innovation in order to meet the demands of the Covid 19 situation.

Now, we speak to two air ambulance charities serving two very different areas geographically and demographically to find out how the pandemic continues to affect them and what changes have not only proved necessary but also valuable and are likely to be here to stay.

Scotland's Charity Air Ambulance (SCAA) has been largely able to maintain the same service throughout the pandemic as before it. CEO David Craig says: "Air ambulance demand dropped during the first lockdown while everyone simply stopped doing anything – although people still had strokes, cardiac arrests and so on. Then demand quickly rose in the summer of last year before dropping again in the second lockdown. As the situation – and the restrictions – eased, we became busier than ever. August 2021 was our busiest month in the charity's history as people not only got back to their usual activities, but also did even more as they were so desperate to get back out there.

"Our crews had to deal with this increase while under very challenging working conditions, with additional procedures and cumbersome protective and safety equipment – a task they took



on uncomplainingly. In fact it amazes me how the crews just adapt and carry on their work diligently and professionally in the midst of a pandemic. Pilots, paramedics, doctors, engineers – they have just kept turning up every single day to keep the service running.

"Our charity team experienced a greater impact. We anticipated a reduction in funding and have had to look at new ways of engaging people, especially digitally. What the situation did, however, was to give us the motivation to try and test new fundraising ideas – it really accelerated this process out of sheer necessity. We engaged with many, many supporters, old and new; we increased our Facebook followers from 35,000 to 100,000 – all glad to read our positive news stories during a really bad news period. Our new ideas were very successful, helping us to maintain our fundraising levels and avoid the prospect of our first deficit in eight years of operation.

"You tend to find that in a crisis, people want to continue to give – especially as this was a medical crisis and we are a medical charity.

"As we return to normality, we will use all we have learned about engaging digitally and also get back to our face-to-face community fundraising. We're recruiting new staff to service the increased level of engagement and adjusting to a hybrid model of combined home working and office working."

Also reflecting on the pandemic's impact is Midlands Air Ambulance Charity (MAAC). Helen Stevens, Communications and Marketing Manager, first picks up on the fundraising challenge: "Regular, committed giving has gone up over the last 12-18 months, while community donations and corporate donations have obviously taken a hit. But people have been coming up with new ways to support us and we're all thinking creatively about partnership activity. We're fortunate to have incredibly loyal supporters – for example, our Bike4Life event couldn't go ahead but when we ran a virtual event, 95% of participants donated anyway.

"We redoubled our efforts to keep MAAC in the media and on social media and in various other digital spaces, with this focused activity resulting in a huge increase in visibility in the media, as well as additional income via online, text and virtual event fundraising as mentioned.

"It was important to keep our fundraising level consistent because demand for our service has never faltered through the pandemic. However, we did see some changes in the nature of the incidents we were called to. Pushbike incidents increased 400%,





there was an increase in domestic violence incidents, paediatric cardiac arrests, DIY disasters, falls and unfortunately an increase in knife and gun crime too.

"Our crews did not need to adapt their clinical skillset to meet the patients' needs but working in level three PPE with loud breathing apparatus made the working conditions much more challenging. As an organisation, we knew it was vital that the aircrew received sufficient downtime between shifts to enable them to properly rest and recover before another shift.

"To enable this to happen, the strategic decision was made for the aircrew to split their shifts between operational hours working on the aircraft and also to support colleagues at WMAS' (West Midlands Ambulance Service) emergency operations centre as call demand increased significantly during the lockdown period. This decision also reflects our 'one team' mentality, directly supporting the NHS to help ease the rise in pressure and demand on the ambulance service. The split shift has been a great approach that has allowed interaction without the risk of wiping the whole team out if Covid struck.

"WMAS was dealing with 6,000 calls a day at one point, compared to its normal 2,500 – we were told it was like having a New Year's Eve every single day. Many factors came together to create this situation, such as people holidaying at home, having problems accessing their GPs and so on.

"In the office, we quickly adapted to hybrid working. It's too early to say if this way of working is for the long term – we're constantly reassessing the most effective and safest way of working. However, we will be opening our new HQ in Spring 2023 and want to be able to engage with both visitors and supporters. We're also very aware of our team's mental health and have a programme available to support the whole charity, as well as the TRiM (Trauma Risk Management) programme for clinicians.

"We are currently in the planning process for our next five-year strategy and have been reflecting on our resilience over the last 18 months and how our crisis management and risk management processes have withstood a real test. We want to take this resilience, adaptability and innovation forward and build on what we have achieved. We have invested in marketing and communications and this will continue to be important as we seek to generate income in a changed environment.

"We reflect on how the pandemic has created collaborations that have broken down boundaries both internally and externally, and also how it has changed how we work with the community.

"As we return to normality, we will use all we have learned about engaging digitally and also get back to our face-to-face community fundraising. We're recruiting new staff to service the increased level of engagement and adjusting to a hybrid model of combined home working and office working."

David Craig, SCAA

With support from corporate partners, such as Phoenix Group and M6toll, we are reinvesting more in the community by providing people with skills in bleed control and CPR that help to save lives before we even arrive on scene.

"It's been a tough period but we're pleased with how we've responded. We have won awards at the Asian Business Chamber of Commerce Awards and been shortlisted for the Birmingham Post Business Awards, which has been rewarding because these are not charity sector awards, they are awards that recognise how we are running our business with good governance and good leadership."

 Photos supplied by SCAA and MAAC.



CLOSER COLLABORATION WITH HM COASTGUARD



Airway asked HM Coastguard to reflect on the relationship between themselves and air ambulance services:

Emergency services are part of one family. A family dedicated to providing potentially lifesaving support in the most dire of emergencies. When the 999 call comes in, we all look to respond in the quickest best way possible and that means working together.

At HM Coastguard, we are keen to work with our friends in the air ambulance services to make sure that when that distress call comes in, we all pull together.

As part of that, we work with the health authorities and a number of air ambulance charities to share knowledge and expertise. Collaboration is always useful – in this case, it might save lives.

Collaboration

We have previously reported on the great work which has been done with Hampshire and Isle of Wight Air Ambulance. This has allowed both services to build on their relationships, but more importantly, to allow air ambulance crew to be carried on HM Coastguard's helicopters, saving time and – therefore – potentially lives.

We continue to encourage similar initiatives across the UK as it is only through that close collaboration that we can build shared understanding and improve the services we all provide. Close co-operation is particularly vital at this time when all services are under immense pressure to respond in very challenging times.

As a recent example of the benefits of close collaboration, throughout the G7 summit an additional dedicated search and rescue (SAR) aircraft was made available to support the health services. The request from the NHS was to support the medical evacuation of VIPs throughout the summit. As part of this support, the Cornwall Air Ambulance Trust deployed Critical Care Paramedics with the search and rescue aircraft at Newquay in the event it was needed. This provided an excellent opportunity for the crews to liaise and learn about our respective service capabilities.

No-one would disagree that everyone has had to cope with quickly changing circumstances as the pandemic unfolded. But during this time, HM Coastguard has continued to provide additional support to the NHS. This works both ways. It helps us to learn about the NHS and the NHS to learn about us. We've shared operational protocols and capabilities, all of which supports and provides opportunities to improve the outcome for what all of us care about the most – our patients.

As we move forward, we are keen to seek more opportunities to encourage local crew exchanges, base visits and to explore shared learning opportunities which will help to grow mutual



understanding and develop closer operational relationships to help improve the services that we provide.

Emergency Air Response Working Group

As part of the role of UK Search and Rescue, the Emergency Air Response Working Group (EAR) was formed in 2016, under the auspices of the UK SAR Strategic Board. The aim of the Group is to seek to improve collaboration across all emergency service aircraft and to get the right asset to the right location to support the operational mission. Membership of this Group is drawn from all the emergency services, the regulators and departments with a responsibility for SAR, enforcement or health services.


The EAR Working Group has been focusing on the protection of lower airspace and hospital landing sites and is seeking to encourage a more collaborative approach to planning applications to ensure the safety of these vital areas is prioritised for all emergency service aircraft.

To find out more information about the EARWG please email SAR.Response@mcga.gov.uk

The future of Search and Rescue – UKSAR2G

The UK Second-Generation Search and Rescue Aviation programme (UKSAR2G) is looking to provide a market-led tailored approach to search and rescue which will replace the existing aviation services after 2024. This will be combined with using the latest technology and innovation to help find people even more quickly in the future and will build upon the great collaborative work that has already been achieved.

To find out more about UKSAR2G please visit www.gov.uk/mca/uksar2g

 Images supplied by HM Coastguard.

FROM AFGHANISTAN TO GLASGOW

Gama Aviation 

Gama Aviation is relatively new to the HEMS market after nearly four decades as a fixed wing air ambulance operator. An agile, responsive and customer-focused company, it can provide a decisive advantage to its customers, not least those who operate time-critical, life-saving services. The company provides turnkey solutions for the Governments of Jersey and Guernsey but is most well known for providing the air assets, crews and transfer facilities for the Scottish Ambulance Service. Ciar Van Holstein, an Airbus H145 pilot and Glasgow Base Manager, has a remarkable tale to tell.

Aged 11, Ciar escaped Kabul, which was under siege from the Taliban. Ciar adds: "In truth, I am lucky to be alive. Childhood friends either managed to get out or were killed by bombs and there is not a day that I am not grateful to be here."

"My adoptive mum had her own NGO (Non Governmental Organisation) in the Netherlands and carried out humanitarian projects in Kosovo, Bosnia and Afghanistan. She is my role model."

"I was four or five years behind with school work when I arrived in the Netherlands, not knowing how to read or write in any language, but I knew that my future lay in studying and I never stopped through university and pilot training."

"My birth father died when I was seven and my mum, in

Kabul when I was 15. This is the everyday story of families in Afghanistan."

Ciar's first humanitarian job was with the United Nations as co-pilot and base manager for missions in Chad.

"I was a quick humanitarian emergency response pilot for the World Food Programme. We were transporting humanitarian aid workers, food, water and medicines but the region was not always safe to fly and the situation could change overnight."

"The situation in South Sudan is very complex and there are many regions you have to avoid flying over or, alternatively, fly 7,500 feet above ground level. If you did make the mistake and flew over those red zones, then you got shot at, and helicopters were downed and crew killed."

"We are all heavily dependent on others in the team who have your back and you theirs. If there was ever a learning curve for staying focused and calm, this was it."

In Scotland the challenges are different. Weather is often the biggest obstacle. "You can have four seasons in one hour and while the helicopter is equipped with good navigational aids, the safety of your paramedics and patients takes precedence always," said Ciar. "You cannot risk the lives of passengers while trying to save others. It's the golden rule of flying."

SPORT. BINGO. FUNDRAISING: WHAT'S NOT TO LIKE?

Match Bingo is a new game devised by Real Time Sports Bingo that creates a brand new and very engaging way for air ambulance charities to raise funds.

Match Bingo takes all the positives of lotteries – a proven success for air ambulance charities – such as predictability, ease of play, weekly income, low entry price, but with an added dose of fun. Its creators believe that it could help air ambulance charities to reach and retain an audience they haven't attracted before.

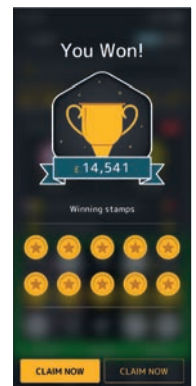
The game works by randomly allocating players a digital bingo card of events or phrases used in a football match. Throughout the match, the app will automatically cross off the cues in real-time. Players lucky enough to have been assigned a winning card then win various pots of money. Will Buckley, Chief Executive, comments: "It is easy to see the attraction – for many sports fans, this is something they already listen out for

and talk about with their friends, on social media and so on. Now they have the added excitement of possibly winning some money and at the same time helping a vital, life-saving service. The other important point is that the player doesn't get to choose the phrases – like bingo, it is out of their hands so there is no betting mentality."

Match Bingo ran a trial with East Anglian Air Ambulance earlier this summer. The charity found it straightforward to set up because the Gambling Commission see Match Bingo as a simple lottery so they were able to apply to run it as an additional draw to their existing lottery, and Match Bingo came up with a payment provider to work alongside their existing systems. Players went through the EAAA website to sign up and were made aware of the support they were giving to EAAA throughout. The audience was more male than usual and there were clusters of players in their 20s and 30s.

Will Buckley adds: "Charities have been severely challenged over the last two years. The future of fundraising looks, more than ever, to lie in digital engagement delivered with a community feel. Match Bingo offers something new and exciting in charity fundraising, wrapped up in something familiar, and we believe it's perfect for air ambulance charities."

Match Bingo is widening its range of games, as all TV programmes which feature live events – including many sports but also TV shows aired in real time – can have bingo games built round them. If you'd like to explore whether your charity could attract new funds through offering Match Bingo, get in touch with their leadership team, Will Buckley (will@matchbingo.co.uk) or Michael Cutbill (michael@matchbingo.co.uk) to discuss the product and a possible short-term trial.





BMW X5 xDrive45e AC PHEV A HYBRID NOW AVAILABLE WITH A POWER SOURCE FOR ROLE-EQUIPMENT.

Emergency Service Fleet Managers face a challenge of how to access power to support role-equipment on Hybrid vehicles and not induce system faults.

The BMW X5 xDrive45e AC PHEV model is now available with a BMW auxiliary 60 Ah GEL battery, split charge system, fuse-rail, CANbus interface and are supported by the BMW vehicle warranty through the BMW Aftersales network.

For further information please contact the BMW Group – Government and Authorities Division on:

- ☎ 0370 505 0144
- 🌐 www.bmwgroup-gaad.com
- ✉ GAAD.enquiries@bmwgroup.com

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