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SHOW & TELL GUIDE

07 -08 September 2022

HELITECH EXPO

Excel Centre

London UK

<https://www.helitech.co.uk>

8 November - 10 November 2022

EUROPEAN ROTORS

Koelnmesse, Cologne,

Germany

<https://www.visit.europeanrotors.eu>

WORLD HELICOPTER DAY

In August 2022 at a place somewhere near you or created by you. WHD was started to celebrate these magnificent machines and their varied use.

06 March - 09 March 2023

HAI HELIEXPO

Georgia World Congress Centre

Atlanta, USA

<https://www.rotor.org>

2023

ROTORTECH

Cotswold Airport, UK

<https://www.rotortechuk.com>

Rescheduled from 2022

Please note there may be changes to dates and times, venues and whether they are physical events or done by various other methods depending on the COVID restrictions at the time and place and also dependent on the war in Ukraine and elsewhere across the globe.

HELICOPTER LIFE

SUMMER 2022

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The Lord Glenarthur, DL

Jennifer Murray

Michael J. H. Smith

Malvina Nicca ATPL

EDITOR-IN-CHIEF / PILOT

Georgina Hunter-Jones

editor@helicopterlife.com

CREATIVE DIRECTORS

art@helicopterlife.com

COPY EDITORS

Gerald Cheyne, Jean Dubourcq

CONTRIBUTING EDITORS

David Oliver, Peter R Foster, Arjan

Dijksterhuis, Alan Norris, Carlo Kuit & Paul

Kievit/Bronco Aviation

CONTRIBUTED PHOTOGRAPHY

Alan Norris, Arjan Dijksterhuis, David Oliver,

Carlo Kuit & Paul Kievit/Bronco Aviation

Peter R Foster

SPECIAL THANKS TO

Gerald Cheyne,

ADVERTISING

Telephone: +44-(0)23-9263-1713,

advertising@helicopterlife.com

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Go to our website or turn to page 60

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COVER PHOTOGRAPH

AeroMediVac the Dutch Way

Carlo Kuit & Paul Kievit/Bronco Aviation

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The world of helicopters has changed immensely since I was a young eager helicopter pilot thrilled by everything a helicopter could do, and more importantly what you could do with it. Now, as you will see from this issue of Helicopter Life, drones are taking over in a lot of places from the helicopter and, unfortunately, due to the current world situation, there is a lot more military work for both helicopters and drones. Life is very different from the era when Frank Robinson imagined everyman having a helicopter in their garage and designed his very light helicopter with that in mind.

However, that is not to say all the changes in the helicopter world are bad: there are far more air ambulance and police helicopters than there were in the 1980s, and the pilots are very often civilians who have never been in the military and women. For women themselves, there has been a huge change in their ability to fly professionally. It is important to remember that until the mid 1990s women could not fly in the UK services, were highly restricted on the oil rigs and were not encouraged to fly in the air ambulance. All that has changed enormously. We have not yet reached the time when 50% of pilots are women, but there is slow progress in that direction.

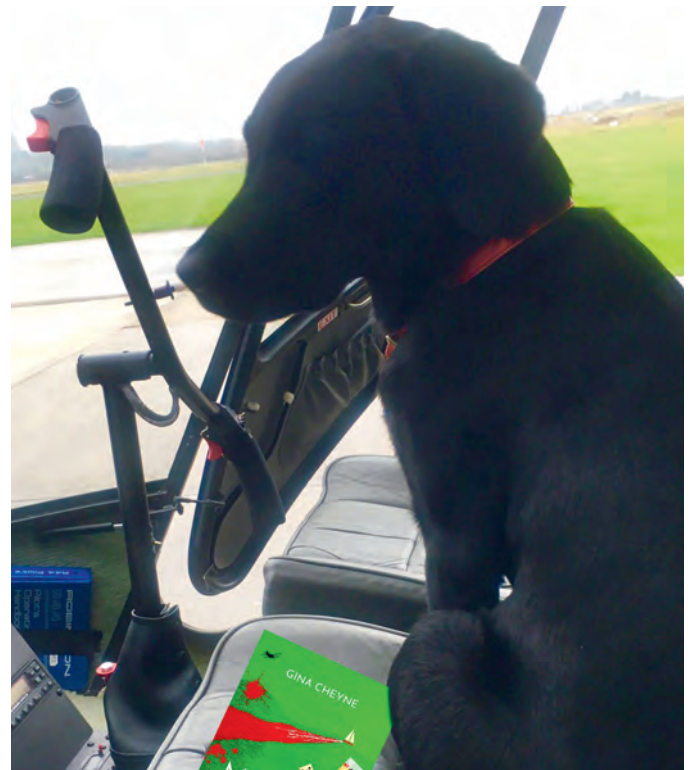
To illustrate this difference in the direction that helicopters are going I was told this story about flying in the 1960s. The pilot, call him Ken, was in search of a dog. He knew there was a breeder in a village not far from his home. So, he flew over to the village, but discovered he could not find the exact whereabouts of the breeder from the sky (something that happened to us all before GPS!) He therefore landed on the village green where a young boy was playing with his sister. He called over the boy and asked if he knew where the breeder lived. The boy did and offered to show Ken the way. He said it was perfectly possible to land in the breeders garden (yes OK but this was the 60s and presumably the breeder lived on a farm). Anyway, the boy got into the helicopter, the two of them flew over to the breeder, and landed. Ken bought the dog and flew himself, boy and dog back to the village green. There he gave the boy some money for helping him and flew off back home with the puppy in the helicopter (I've always imagined the puppy sat in the front seat but who knows). There are so many reasons why that could not happen today in the UK.

I did actually have a similar experience (but somewhat different!) when I was flying in the USA, hour building, in the early 1990s. My passenger, who was from the area, wanted to buy a bottle of milk, so he asked me to land on a patch of green near a shop that he knew would have milk. I did. He got the milk and we flew home. I don't know if this would still be possible in the USA.

Sorry if this sounds like the rambling of an old woman but I have recently become a crime writer (my second book is now published) and it makes you think about all the stories you have heard and all the times you have lived through.



Happy flying and I hope everyone is enjoying this incredible good weather. Although I do remember doing a corporate day for Dennis Kenyon in similar weather and it was so hot inside the H300 (Dennis wouldn't let me have the doors off in case the passengers got frightened - I know it doesn't sound like Den but perhaps he was being protective of me) that my whole body was running with sweat like a fountain. One of the passengers got in and she said: "WOW, you are so wet!" I was never sure if this was a literal or metaphorical comment!



Air Mobility Initiative lays the foundations for electric air transport of the future

We are often asked whether a particular turbine aircraft can use SAF or whether one SAF fuel can be mixed with another. The answer to both is yes, as SAF is certified to the same global specifications as conventional jet. Product quality advisor, Dr Andrew Glendinning, and aviation fuels research and development manager, Dr Alisdair Clark, provide further detail into what to expect from SAF as a 'drop-in' fuel.

To advance the development of regional and Urban Air Mobility, leading companies, universities, and research institutions as well as municipalities and organizations are joining forces to form the Air Mobility Initiative (AMI). The members of the Air Mobility Initiative include Munich Airport International, Airbus, City of Ingolstadt, Deutsche Bahn, Deutsche Flugsicherung, Diehl Aerospace, Droniq, Red Cross and Telekom. This initiative, which is funded by the Free State of Bavaria and the Federal Republic of Germany, will set up a series of research projects aimed at making electric air mobility within and between cities a reality. The joint projects are centered around three main areas: electric aircraft, air traffic management services, and vertiports, meaning the necessary infrastructure on the ground.

"A few years ago, Air Mobility was just a vision. Today, with AMI, we are taking a big step towards realization. We at Munich Airport International see enormous potential in this new form of mobility. The AMI partnership enables us to jointly develop and implement scalable and sustainable Air Mobility concepts for the public," says Dr. Ralf Gaffal, Chief Executive Officer Munich Airport International.

"We will examine the various elements of such an air transport system in realistic projects to gain an accurate picture of the technical and regulatory requirements" said Andreas Thellmann, Head of Air Mobility Initiative. "Electric air transport can enhance public transport, airports and time critical mobility services, it will be environmentally friendly, quiet and safe."

In a first step, the AMI partners will address the tech-

nological, infrastructural, legal, and social prerequisites for the future implementation of advanced air transport. Subsequently, the knowledge gained will be carried through a demonstration project under real conditions with electrically powered vertical take-off aircraft.

Work on the individual AMI projects began in January 2022. The test flights of the pilot project will be carried out in the region around Ingolstadt. The initiative is funded with a total of €17 million from the Free State of Bavaria and €24 million from the Federal Government. Together with the industry's own funds, this results in a total activity of € 86 million over a period of three years.

Airbus is responsible for the electrically powered aircraft together with Diehl Aerospace, University Stuttgart and other partners. Components and systems for the CityAirbus NextGen are to be developed in this workstream. The area of "Unmanned Traffic Management" deals with the safe and efficient flight of vehicles on their routes in- and outside cities. This topic is being advanced together with Droniq, Airbus, f.u.n.k.e. Avionics, SkyFive, BrigkAir, DFS,

Telekom, Universities from Munich and Hamburg as well as other partners. In the "Vertiport" project innovative and sustainable solutions will be developed for the planning, permitting, implementation and operation of ground infrastructure for electrical vertical take-off and landing vehicles (eVTOLs). In order to integrate vertiports into airports many prerequisites like environmental impact, intermodality, slot neutrality, regulatory requirements, approval of flight procedures and ground infrastructure as well as digital solutions for a seamless travel chain have to be taken into account. Under the leadership of Munich Airport International, a team consisting of interdisciplinary experts from Bauhaus Luftfahrt, Nuremberg Airport, universities of Ingolstadt, Eichstätt and Munich as well as other academic and industry partners will work closely together on this.

Hayward Aviation Rebrand

On July 14, 2022, we announced our re-brand, the final piece in the jigsaw puzzle that brings the Hayward Aviation team into Gallagher.

Since June 2019 many of you will have noticed that our “paperwork” has included various references to Arthur J. Gallagher (UK) Limited; when we became part of the Gallagher Group, following the acquisition of Jardine Lloyd Thompson Group’s global aerospace operations.

This re-brand will enable us to access the Gallagher

by number, continues to grow and our geographical spread widens every year – we have clients in over 70 countries presently and client retention rates are constantly around 90%.

Having started as a specialist aviation insurance broker to serve the UK helicopter sector, we’ve diversified our client base and now count commercial passenger airlines, fixed wing, gliders and e-powered aircraft, along with many more traditional insurance services such as premises and hangar-keepers insurance, airport operations, maintenance and flight schools.

Over the last 30 years we have continuously tried to refine the insurance products we offer to you, while always focusing on quality insurance at a competitive price. A list of the policy enhancements, endorsements and special “exemptions” that we have negotiated over the years would run to two or three volumes.

Today, the conflict in Ukraine and the slow re-emergence of aviation activities, on a global basis impact every renewal, albeit often indirectly. I cannot praise the team here, enough; as they work harder and harder to support every one of our clients.

Looking ahead, we are seeking a gentle uptick in enquiries for new helicopter owners in the UK, as well as signs that some owners are trading up. In our discussion with insurers the strength and quality of our UK helicopter client base is recognised as second to none – enabling us to apply pressure against premium rate increases. We continue to focus on delivering a stable and reasonably priced insurance policy, backed up by superlative service and support.

Our business, at its very essence, is about personal service. Changing our brand will not change our approach – indeed, the Gallagher Board of Directors has supported us and backed us 100% throughout the past year... and we have exciting plans for future, with their support.

We are looking forward to getting out and re-connecting with owners and pilots as the restrictions of the past two years recede. Since the earliest days of Helicopter Life we have always enjoyed reading about the diverse and dynamic helicopter market and we while no longer sit around waiting for the latest edition to drop through our actual letterbox, we

look forward to reading about the future of the global helicopter world, ...wherever that may take us... e-VTOL, pilot-less Urban Air Mobility systems etc, with Helicopter Life.

Guy Holland-Bosworth

CEO

Gallagher General Aviation



global resources in terms of insurance products and services, delivered by experts across 39,000 employees around the world – while still ensuring that all our clients, many of whom are fellow readers of Helicopter Life, continue to have the same day-to-day personal contacts at Gallagher.

Our e-mails have changed, although our existing Hayward addresses will continue to operate, so please continue to contact your normal account executive...the format is firstname_surname@ajg.com

After 30 years, it will probably take us a little time to learn to answer our phones differently and for many of us Hayward has been the foundation of our working careers.... but things change!

The past two years have certainly pushed us to change how we support you and run the business. Like many companies we have switched to an agile working pattern, mixing days in the office with working from home with, we hope, no adverse impact on the service we give to our clients.

As a measure of “client satisfaction” our client base,

FLYING CRACKERS

New Operator to take over Penzance Helicopter Service

A new operator will take over the operation of the Penzance Helicopters service to the Isles of Scilly this winter, replacing current



operator Sloane Helicopters. The helicopter service flies year-round between Penzance and the islands of Tresco and St Mary's on the Isles of Scilly and has been operated by Sloane Helicopters since it was launched in March 2020.

The new operator – which will be announced shortly – will take over from November 2022. Sloane Helicopters is already working in close cooperation with the new operator to ensure a seamless transition for passengers and staff. Penzance Helicopters flies to Tresco and St Mary's six days a week throughout the year, offering a 15-minute flight to the islands from a purpose-built heliport on the outskirts of Penzance. Since launching, the service has carried over 50,000 passengers between Penzance and the Isles of Scilly, increasing travel capacity, resilience and ease to the islands. Jeremy Awenat, Managing Director of Sloane Helicopters, said: "We are proud to have been the launch

operator of this new service for the visitors and residents of the Isles of Scilly. "We look forward to working closely with the new operator to ensure a seamless transition for our passengers and staff, and we wish them continued success on this important service."

Get Hydrogen Ready

Airport owners and operators need to plan for the delivery and storage of hydrogen now if they are to be ready to fuel hydrogen-powered aircraft by 2035. This is according to new research by Jacobs (NYSE:J), 'Airports as Catalysts for Decarbonisation', which provides a roadmap for airports to implement hydrogen fuelling technologies, building on the company's work for the Aeronautical Technology Institute FlyZero Report, "Airports, Airlines and Airspace - Operations and Hydrogen Infrastructure". Due to the length of time it takes to



plan, design, consult and implement new airport infrastructure, airports must make provisions ahead of the first commercially available hydrogen-powered aircraft expected in the early to mid-2030s. Emissions generated from flights account for most of an airport's climate impact. Around 80% of global aviation sector emissions come

from flights longer than 1,500 km. It is estimated that the use of hydrogen powered aircraft could reduce the climate impact of flights by 50-75%. Airbus has identified a hydrogen-combustion propulsion system to potentially provide a net-zero commercial aircraft by 2035.

EasyJet Partners GKN

EasyJet, Europe's leading airline, has announced it is working with GKN Aerospace, the world's leading multi-technology tier 1 aerospace supplier, to work toward reducing carbon emissions in aviation through the adoption of zero carbon emission technologies. easyJet will support the development of GKN Aerospace's Hydrogen Combustion (H2JET) and Hydrogen Fuel Cell (H2GEAR) technology, including exploring the options for flight demonstration, as part of the airline's ambition to de-carbonise aviation. Among others, easyJet will provide insights into operational requirements and economics.

H2GEAR is a GKN Aerospace led ground-breaking UK collaboration



programme aiming to develop a liquid hydrogen propulsion system for sub-regional aircraft that could be scaled up to larger aircraft. Liquid hydrogen is being converted to electricity within a fuel cell system. This electricity efficiently powers the aircraft, eliminating carbon emissions and creating a new generation of clean air travel. The H2GEAR programme is support-

ed by £27M of ATI funding, matched by GKN Aerospace and its industrial partners. H2JET is a Swedish collaborative two-year programme led by GKN Aerospace to push development of key subsystems for gas turbine-based hydrogen propulsion of medium range civil aircraft.

World's First Hub for Flying Taxis

The UK-based developer of ground infrastructure for air taxis and autonomous delivery drones, has opened "Air-One®", a world-first demonstration of a fully-operational hub for electric vertical take-off and landing (eVTOL) vehicles – such as air taxis – and autonomous cargo drones, heralding a new age of zero-emission, low-congestion urban transport.

Urban-Air Port® – backed by the UK Government and supported by Supernal – will operate Air-One® in the heart of Coventry for at least one month. Air-One® will provide a blueprint for more than 200 vertiports planned worldwide by Urban-Air Port® over the next five years to meet growing demand.

The advanced air mobility (AAM) market is set to take off, with forecasted growth of 9% annually to reach USD \$1 trillion within the next two decades. Despite a booming market and a strong pipeline of eVTOLs entering commercial operations this decade, the lack of ground infrastructure remains one of the single biggest barriers to growth, according to analysis by NASA. Air-One® will demonstrate how purpose-built ground infrastructure can unleash the potential of AAM to decarbonise transport and cut air pollution and congestion, whilst providing seamless passenger journeys and deliveries.

Air-One® is a blueprint for more than 200 sites planned by Urban-Air Port worldwide over the next five years to meet growing demand.

Opening of Air-One® puts Global Britain at the forefront of a new age of clean transport.

Schweizer Deliveries to El Salvador and Senegal

Schweizer continues to grow with increased contracts and deliveries to foreign militaries.

Senegalese Air Force

In May 2022, Schweizer delivered another new Schweizer 300C helicopter to the Senegalese Air Force. The Senegalese Air Force took delivery of the first production Schweizer 300C helicopter in July 2021. In March 2022, the Foreign Asset Trade Company signed a follow-on contract with Schweizer for five additional Schweizer 300C helicopters for the air force. The first

aircraft from this contract was delivered in May with the remaining deliveries scheduled before the end of the third quarter of 2022.

The five additional Schweizer 300C helicopters will support the Senegalese Air Force's flight training academy and will be used for ab initio, instrument, and vertical reference training. Each is fully equipped for IFR flight training with Garmin GPS, Bendix King NavComs, Garmin Transponders with ADS-B out, and RC Allen digital artificial horizon and directional gyros. Each is also outfitted with auxiliary fuel tanks to extend flight time to 6.4 hours. Two of the helicopters are equipped with cargo hooks for vertical reference and long line training.

Salvadoran Air Force

In April 2022, Schweizer delivered a new base line VFR Schweizer 300C to the Salvadoran Air Force, the first new Schweizer helicopter delivered to the country of El Salvador since 1984. Ordered through Schweizer



dealer CZA S.A. DE.V in El Salvador, the aircraft will be used to provide ab initio flight training to air force pilots.

Additionally, the Salvadoran Air Force has made a verbal agreement to purchase a new IFR-equipped Schweizer 300C before the end of the year, pending budget approval.

"The Salvadoran Air Force is a long-time Schweizer operator, and we are honored to be able to continue supporting them with new aircraft," says Horton. "As our production builds, we are thrilled to increase our delivery capabilities to our customers and meeting our promises to rebuild support for the fleet."

UK New Medium Helicopter competition Launched

Words and pictures courtesy of David Oliver and others (see pics)



Leonardo has conducted weapons firing trials with laser-guided rockets the AW149. (Leonardo)

In May the UK MoD launched a £1 billion competition for 44 New Medium Helicopters (NMH) to replace to rationalise its existing multiple rotary wing requirements into one platform-type, maximising commonality in order to improve efficiency and operational flexibility.

NMH will provide a common medium lift multi-role helicopter, fitted for, but not with, specialist Mission Role Equipment (MRE) and able to operate in all environments in support of defence tasks.

The contract duration is anticipated to be seven years

but will be determined by the agreed production schedule that will reflect the supplier's ability to complete delivery of aircraft and an initial support phase.

The support solution duration is anticipated to be approximately 5 years from first aircraft delivery, taking into consideration the manufacturer's delivery schedule, or until aircraft production is complete, whichever is later. Training services will commence prior to first aircraft delivery to support entry into service.

It is anticipated that the maximum contract duration will be 7 years.