It seems only natural for mobility to evolve upwards.



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GLOBAL ADVANCED AIR MOBILITY FORUM SUMMARY REPORT

"The future of aviation will be shaped not by innovation alone, but by a collaborative effort to build a sustainable and inclusive industry."

Jam Hartley

Honeywell SAEDALEAN

KEYNOTES

Dunia Abboud Verity Richardson Olga Fleming Jeremy Hartley 48 National Updates + 9 Special Presentations + 2 Regulatory Discussions EDITOR-IN-CHIEF Amin Vafadar

SUMMER 2024 WWW.AAMINSTITUTE.ORG GLOBAL AAM FORUM SUMMER 2024



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PRESIDENTIAL LETTER

Advanced Air Mobility Institute



First, I want to express my sincere gratitude for the dedicated volunteer staff who give generously of their time every week to further our mission of broad public benefit. Amin, Kristen, Ashiru, Oleksanda, and Nick, your sharp attention to detail and critical thinking ensure our Institute maintains the highest levels of professionalism and I cannot thank you enough.

To our Board of Liaisons: each of you are highly regarded experts in your country and it is humbling to witness the pride you take in sharing these seasonal updates. You are truly on the cutting edge of this fantastic future of sustainable transportation. The care you put forth in identifying the good, the bad, and the ugly are invaluable to our collective understanding of the evolving public sentiment toward emerging aviation technologies. Your feedback is essential to our ability to effectively educate and advocate and I sincerely appreciate the sacrifices you make.

The Forum is designed to bring practioners and thought leaders together to exchange ideas, while the Summary Report is aimed at synthesizing concepts, analyzing survey results, and driving consensus around shared values. Those values are **Safety**, **Dignity**, and **Security**. We believe that use cases that *save lives and reduce harm* should be prioritized. We believe that mobility policies should not only avoid infringing on human rights, we should craft them to *bolster civil and environmental rights* along the way. And we believe that in an increasingly connected world, we have an obligation to *shore up system vulnerabilities* early and often.

Enjoy reading this compilation of national updates, industry insights, and fresh ideas. If you find this forum summary report valuable, then please consider donating to our cause of increasing public awareness, achieving public acceptance, and ultimately earning public trust. Thank you.

All the Best, Dan

Destat

Daniel C. Sloat, JD/MBA Founder & President

"TO EDUCATE AND ADVOCATE FOR THE BROADEST PUBLIC BENEFIT THROUGH THE AVIATION ECOSYSTEM GLOBALLY"

MESSAGE FROM THE EMCEE



It was an extraordinary honor to serve as the Emcee for this year's Summer 2024 Global Advanced Air Mobility Forum. Over these two days, I had the privilege of witnessing firsthand the remarkable progress and transformative potential of our industry. The discussions, presentations, and collaborations that unfolded were a clear testament to the dynamic momentum driving the Advanced Air Mobility (AAM) sector forward.

As we continue to push the boundaries of innovation, we must recognize that the future of aviation will be shaped not by technology alone but by the collaborative spirit of our global community. Our industry leaders, regulators, researchers, and advocates are the backbone of this movement, and it is through your unwavering dedication that AAM is rapidly evolving from concept to reality.

However, the journey toward realizing the full potential of AAM is far from complete. As we strive to integrate AAM into the fabric of everyday life, we must address several critical areas. Strengthening international collaboration, overcoming regulatory bottlenecks, and investing in robust infrastructure are essential to ensuring that AAM implementations are both successful and sustainable. Additionally, engaging the public and educating them about the benefits of AAM—such as reduced environmental impact—will be crucial in building the trust and acceptance necessary for widespread adoption.

The road ahead is filled with challenges, but it is also brimming with opportunities. Together, we can overcome these obstacles and pave the way for a future where AAM transforms transportation, empowers economic growth, and contributes to environmental sustainability. Let us continue to advocate for AAM not merely as a technological advancement but as a positive force that will redefine how the world connects, moves, and prospers.

Thank you for your contributions, your vision, and your commitment. I look forward with great anticipation to the incredible advancements we will achieve together in the years to come.



Amin Vafadar Emcee, Global AAM Forum

The Global Advanced Air Mobility (AAM) Forum held in Summer 2024 marked a pivotal moment for the industry, bringing together global leaders, regulators, and innovators to chart the future of air mobility. This two-day event, hosted by the AAM Institute, showcased the significant advancements and challenges within the sector, emphasizing the importance of collaboration, regulatory support, and public engagement in driving the industry forward.

Key Discussions and Insights:

- Advancements in AAM Technology: The forum highlighted the rapid technological progress in AAM, particularly in electric Vertical Takeoff and Landing (eVTOL) aircraft, drones, and related infrastructure. Discussions underscored the critical role of innovation in shaping the future of urban air mobility, with significant strides being made in both the public and private sectors.
- **Regulatory Frameworks and Government Support**: A major focus was placed on the evolving regulatory landscape, with contributions from global aviation authorities such as the FAA, EASA, and the UAE's GCAA. The alignment of regulations across regions was identified as essential for the seamless integration of AAM technologies. However, challenges remain, particularly in areas such as pilot certification, infrastructure development, and public acceptance.
- **Public Sentiment and Stakeholder Engagement**: The forum revealed mixed public sentiment towards AAM technologies, with optimism prevailing in regions like the Middle East, while other areas, such as Central Europe, exhibited cautious attitudes. Engaging with the public through education and transparent communication was emphasized as critical for fostering broader acceptance and support.
- **Global Collaborations and Opportunities**: Liaisons highlighted the immense potential for international collaborations to drive the AAM industry forward. Opportunities were identified in areas such as emergency response, healthcare, and urban transportation, with ongoing projects throughout Africa showcasing the cost-effective and transformative impact of AAM technologies.
- **Challenges and Threats**: Despite the progress, the forum also addressed significant challenges, including regulatory uncertainty, economic instability, and infrastructure bottlenecks. These issues were recognized as potential barriers to the widespread adoption and success of AAM technologies.
 - Dunia Abboud promoted their inaugural ICAO Advanced Air Mobility Symposium coming up in September as a milestone event, emphasizing its holistic approach to exploring AAM's potential and challenges.
 - Verity Richardson of Archer Aviation underscored the need for public advocacy, shifting from mere acceptance to active support for AAM technologies.
 - Olga Fleming, Chairwoman of the World Sustainable Development Fund, called for standardized regulations and international cooperation, citing the UAE's pioneering efforts in AAM regulation as a model for others.
 - Jeremy Hartley emphasized the critical role of communities in driving AAM forward, urging global collaboration to overcome challenges and realize the industry's full potential as a complement to multi-modal solutions.

A comprehensive survey was conducted to identify the most beneficial and impactful use case applications for Advanced Air Mobility technologies from a global perspective. Responses were gathered from Liaisons to provide an overview of the current priorities and potential areas for AAM deployment:

- 1. **Public Safety**: AAM technologies can improve emergency response, disaster relief, and routine tasks for first responders around the world. These life-saving missions should be prioritized over all other use cases because not only are there objective, indisputable benefits, it will also bolster progress in terms of public acceptance for each of the other respective use cases. Not only did the Public Safety aka Drones as First Responder (DFR) use case earn a composite #1 ranking, *37.2% of Liaisons believe it to be the single most important application*. Indeed, no Liaison ranked it last on their individual response.
- 2. Air Medical Transport: The high ranking here reflects a global recognition of the potential for AAM to enhance access to healthcare, especially in remote or underserved areas, must be prioritized. Whether the intent is to expedite EMTs to the site of an accident, more quickly retrieve patients in the field, or delivering medicine, vaccines or even organs, AAM technology can compliment ground ambulances as well as conventional helicopter MedEvac operations. The Air Medical Transport aka eVTOL as Air Medical Service (eAMS) use case commanded a *top 3 ranking among 69.8% of Liaisons*.
- 3. Agriculture Services: UAS drones and autonomous helicopters have proven to have great promise in precision agriculture, including crop monitoring and spraying, which can optimize farming practices and contribute to sustainable agriculture goals. Interestingly, this use case had the most extreme distribution of rankings with *11.6% as highest priority but also 9.3% as lowest priority*.
- 4. **Cargo Delivery**: There continues to be growing demand for efficient, fast, and reliable transportation of goods, particularly in urban and suburban areas, showcasing AAM's ability to revolutionize logistics. This category encompasses on-demand commercial products, parcels, and industrial supplies. The focus here is on the efficiency and cost-effectiveness of using UAS drones or eVTOLs for last-mile as well as eSTOLs or eCTOLs for middle mile. This use case could be quite useful for more rural communities where traditional ground transportation can be challenging due to terrain. The Cargo Delivery use case is definitively a mid-priority use case receiving *more than 2x as many #5 rankings* than any other.



IDEAL MIX OF AAM USE CASE APPLICATIONS

The results provide a clear indication of current global priorities the for investment. The emphasis on public safety and air medical transport illustrates strong demand to leverage AAM technology for life-saving purposes first and foremost. The interest in agriculture services, cargo delivery, and air taxi services underscores the sector's potential to revolutionize supply chain and passenger mobility. logistics Meanwhile, the interest in infrastructure inspection, security surveillance, and military & defense applications reflects the situational awareness capabilities that AAM can provide. As the industry continues to evolve, these insights will be crucial in guiding future developments and ensuring that use cases are aligned with community needs.

USE CASES RANKED BY BROADEST PUBLIC BENEFIT:

1.	PUBLIC SAFETY
2.	AIR MEDICAL TRANSPORT
3.	AGRICULTURE SERVICES
4.	CARGO DELIVERY
5.	SECURITY SURVEILLANCE
6.	INFRASTRUCTURE
	INSPECTION
7.	MILITARY & DEFENSE
8.	AIR TAXI SERVICES

- Air Taxi Services: Interest in urban air mobility reflects a novel approach to providing large cities with new transportation options, though it is viewed by many Liaisons as a longer-term goal due to regulatory challenges and uncertain public acceptance. Namely, while eVTOL aircraft are purposefully designed to produce less noise than conventional helicopters (and NASA decibel testing can confirm) but time will tell whether perceived noise and visual pollution will raise objections by certain segments of the population. This use case hopes to reduce traffic congestion in densely populated areas by providing a faster, more flexible mode for passengers. At this point, *48.8% of Liaisons believe air taxis to be the least important use case for broad public benefit*. This is likely because of concerns that such rides may be prohibitively expensive for everyday citizens, at least in the early stages of this nascent industry. However, air taxi companies around the world have collected and continue to collect the lion's share of investment dollars and media attention.
- **Infrastructure Inspection**: AAM technologies can significantly improve the efficiency and occupational safety of inspecting and maintaining critical infrastructure like bridges and power lines. Infrastructure Inspection received the *most even distribution of rankings: #1: 7%, #5: 9%, #8: 7%*.
- Security Surveillance: This use case focuses on enhancing security operations, such as law enforcement, border patrol, property trespass, and riot control through improved situational awareness. Security Surveillance was *selected only once as the #1 highest priority use of AAM*. Perhaps the notion of increased surveillance invites fears of misuse by authorities and invasion of privacy.
- **Military & Defense**: Defense applications are perceived to provide value in reconnaissance, intelligence gathering, and national security strategy. Although when it comes to broad public benefit, the military & defense use case *consistently ranked among the bottom 3 priorities 53.5% of the time*.

Another survey was conducted to identify the key factors that are most critical to accelerating the development and implementation of the Advanced Air Mobility industry. By gathering insights from country liaisons across all 6 inhabited continents around the globe, the survey provides a view of what is required to propel the AAM sector forward. The results illustrated the multi-faceted nature of the factors driving progress in the ecosystem. Collectively, this is a roadmap for accelerating the implementation and success of the industry globally.



FACTORS DRIVING PROGRESS IN AAM ECOSYSTEM

Legislative Changes emerged as the most popular factor driving progress in the AAM ecosystem, with 36% of Liaisons indicating its importance. This reflects a global consensus that updated and streamlined regulations are crucial for enabling the safe and efficient deployment of aviation technologies. Clear and supportive legislative frameworks are needed to address issues such as airspace management, vehicle certification, and operational standards, which are essential for widespread adoption.

Public Acceptance comprised 25% of Liaisons' expert opinions as the key driver for the industry. Gaining the trust and support of the public is vital for the successful integration of AAM technologies into everyday life. This includes educating the public about the benefits, addressing concerns related to safety and privacy, and ensuring transparent communication about how these technologies will impact communities.

Economic Growth was highlighted by 20% of Liaisons as a significant factor. The potential for AAM to stimulate economic growth, create jobs, and drive innovation is recognized as a major advantage. Tax incentives, investments, and the development of a robust market are essential for attracting further investment and private sector involvement to foster a thriving ecosystem.

Safety and Security research accounted for 16% of Liaisons, emphasizing the importance of ensuring that AAM operations are consistently reliable. Ongoing research and development in areas such as collision avoidance systems, cybersecurity, and operational safety protocols are critical to gaining regulatory approval and public confidence.

Workforce Development was identified by 14% of Liaisons as a key requirement for advancing the AAM industry. Building a skilled workforce capable of supporting the emerging aviation ecosystem is essential. This includes training pilots, technicians, engineers, and other professionals who will be needed to operate and maintain these systems effectively.

PUBLIC SENTIMENT

The Summer 2024 Global Advanced Air Mobility Forum provided a unique opportunity to gauge public sentiment towards AAM technologies across various regions. The findings reveal a complex landscape of opinions that are as diverse as the regions surveyed. To be clear, representatives on the Board of Liaisons are entrusted with answering survey questions not from their individual preferences or opinions but rather, to the best of their abilities, reflective of what they believe the typical citizen in their nation thinks and feels. Therefore, depictions of red to indicate a 'Cautious' sentiment are not to be interpreted as that respective Liaison personally doubting the benefits of Advanced Air Mobility technology. Moreover, depictions of blue to indicate a 'Neutral' sentiment is most likely a signal that the Liaison believes there is a general lack of awareness versus a lack of positive or negative feelings. In future surveys we will attempt to present more nuanced options for more robust insights.



PUBLIC SENTIMENT



Regional Variations

The global map illustrates the varying levels of optimism, neutrality, and caution towards AAM technologies. Asia Pacific and the Middle East, particularly South Korea, China, UAE, and Saudi Arabia, exhibit overwhelmingly positive sentiment, driven by strong government support and ambitious infrastructure projects like NEOM. Africa and the Americas remain neutral for the most part while Europe, home to many prominent OEMs and vertiport infrastructure firms, displays the full spectrum of public sentiment including a more cautious approach - reflecting concerns over safety, regulatory readiness, and social acceptance.

Sentiment Breakdown

The side-by-side pie charts provide a visual of public sentiment proportions, categorizing it into three primary segments: Optimistic, Neutral, and Cautious. Notably, the majority of respondents globally leans toward optimism, with approximately half expressing confidence in the potential of AAM to transform transportation and improve mobility and sustainability. However, a significant portion of the global population remains neutral or unaware and a meaningful minority has reservations indicating the need for increased public education and community engagement to build greater support.

Shifts in Sentiment

When compared to the previous assessment 6 months ago, there appears to be a slight shift away from optimism. However, since our Board of Liaisons continues to grow in total number of countries represented, this is actually a reflection of new members identifying either a neutral or cautious tone from their respective communities. Thus, rather than a change of heart for any Liaison who previously reported optimism, we see that they are being narrowly outpaced. Nonetheless, the persistence of caution, especially in regions with regulatory frameworks that are still maturing in traditional aviation, highlights ongoing concerns about safety, privacy, and the environmental impact of AAM technology.

The SWOT analysis conducted during the Global Advanced Air Mobility Forum provides a cohesive overview of the current state and future potential of the AAM sector. The analysis identifies key strengths, weaknesses, opportunities, and threats that industry stakeholders must consider as they work towards the successful implementation and growth of AAM technologies.

The primary strength identified in the AAM sector is robust Government Support and Investment. This is complemented by a Strong Regulatory Framework in various regions, which provides a solid foundation for the industry's growth. The Skilled Workforce and Advanced Aerospace Infrastructure also play critical roles in advancing AAM.



Existing capabilities and resources that can provide a competitive advantage for AAM deployment.

Respondents highlighted unique national advantages under "Other," such as Portugal's vast Economic Exclusive Zone, which could serve as a significant asset for AAM testing and development. Additionally, the maturity of the UAV/UAS supply chain and growing governmental awareness of AAM potential in countries like South Africa further reinforce the sector's strengths.

However, significant challenges persist. Regulatory Bottlenecks remain the most cited weakness, impeding the development and scaling of AAM technologies. Insufficient Infrastructure and Limited Technical Expertise are also major hurdles that need to be addressed to enable the sector's growth. Public skepticism is another concern, particularly in regions where a thorough understanding of AAM technologies is limited.



Internal limitations or challenges that could hinder the development and scaling of the AAM ecosystem.

Responses in the "Other" category highlighted additional challenges such as environmental concerns, access to funding, and the lack of a dedicated regulatory body or clear government ambition in certain countries. These internal limitations suggest that while the potential for AAM is vast, substantial work is needed to overcome these obstacles.

The AAM sector is poised to benefit from several external opportunities. International Collaborations and Technological Advancements stand out as key drivers of growth. The increasing trend of Growing Urbanization worldwide presents a fertile ground for future AAM solutions, especially in densely populated areas seeking innovative public safety and air medical transport solutions. Government and policy support are also critical, with some regions showing strong potential for AAM integration.



External trends or factors present opportunities for the growth and expansion of the AAM sector.

Among the "Other" responses, the potential for AAM to revolutionize tourism in regions with high visitor numbers and the existence of a strong crewed aerospace capabilities in developed countries were noted as significant opportunities. These factors underscore the importance of leveraging external partnerships and technological innovations to propel the industry forward.

Despite the opportunities, the AAM sector faces several external threats that could hinder its progress. Regulatory Uncertainty is the most significant risk, as inconsistent or unclear regulations can stall development and deter investment. Economic Instability is another critical risk, particularly in regions prone to financial fluctuations. Intense Global Competition and Technological Disruptions also pose risks, as the rapid pace of innovation could render current technologies obsolete and thereby hinder progress.



What external factors could pose significant risks to the successful implementation and growth of the AAM industry?

In addition to these threats, trade barriers and the potential for supply chain disruptions were highlighted under "Other," further emphasizing the need for robust strategies to mitigate these risks.



BOARD OF LIAISONS AAM INSTITUTE



Advanced Air Mobility Institute **REGULATORY AFFAIRS OFFICER** MARILYN PEARSON



Marilyn Pearson, an experienced regulatory specialist with a 24-year background in the FAA, recently shared key insights on the evolving landscape of global regulations in Advanced Air Mobility (AAM) during a presentation. She highlighted the critical role regulations play in driving industry advancements, despite the occasional discomfort that such discussions can evoke.

Pearson emphasized the rapid developments in the AAM sector, particularly in electric Vertical Takeoff and Landing (eVTOL) aircraft, drones, and related technologies. A significant focus was placed on the efforts of the FAA and other global aviation authorities in pushing forward these advancements. For instance, the FAA's Reauthorization Act has funneled substantial funding into AAM and drone testing, with several key sites established across the United States.

Global collaborations were also underscored, such as Joby's acquisition of Xwing's autonomous division and partnerships between companies like Loft Dynamics and eVTOL manufacturers to create advanced simulators. These collaborations are not just about vehicle development but encompass the entire spectrum of operations, from advanced training to airspace integration.

One of the significant achievements mentioned was Joby's operation of a hydrogen-powered eVTOL, which successfully completed a 500-mile flight—a distance ten times greater than what is possible with electric battery-powered eVTOLs. While this marks a milestone, the path forward is not without challenges, as demonstrated by the recent closure of Universal Hydrogen. However, Pearson reassured that hydrogen's potential, particularly in the Middle East, remains promising due to more flexible regulations in the region.

She highlighted ongoing regulatory updates, including the FAA's draft advisory circular for powered lift certification, EASA's second version of special conditions for VTOL aircraft, and ANAC Brazil's regulatory proposals for licensing and rating. Each of these efforts reflects the global push towards harmonization, though challenges persist, especially concerning pilot certification and training. Public sentiment towards AAM and drones is generally positive, particularly for emergency and medical services. However, concerns about noise, privacy, and pilot shortages remain significant hurdles. Pearson noted that as AAM technologies become more integrated into daily life, addressing these issues will be crucial for broader acceptance.

Pearson urged stakeholders to stay informed and engaged as regulations continue to evolve. The upcoming ICAO AAM symposium in September, expected to attract over a thousand global participants, will be a critical event for furthering these discussions and setting the stage for the future of AAM.

AS AAM TECHNOLOGIES BECOME MORE INTEGRATED INTO DAILY LIFE, ADDRESSING THESE ISSUES WILL BE CRUCIAL FOR BROADER ACCEPTANCE.

Advanced Air Mobility Institute REGULATORY AFFAIRS OFFICER



GIANCARLO SILVESTRI

Giancarlo Silvestri, Regulatory Affairs Officer at the AAM Institute, shared valuable insights into the evolving regulatory environment for Advanced Air Mobility (AAM) during his presentation. With a focus on Europe and the Middle East, Silvestri's analysis reflects the significant strides being made in the sector, highlighting key developments and challenges. he began by noting the increasing prominence of electric Vertical Take-Off and Landing aircraft (eVTOLs) at the Farnborough International Airshow, emphasizing the sector's growing traction from both regulatory and investment perspectives. This momentum is crucial as AAM technologies advance from concept to practical application. One notable development in Europe is the anticipated alignment of the UK Civil Aviation Authority (UKCAA) with the European Union Aviation Safety Agency (EASA) standards for eVTOLs. This alignment is particularly significant post-Brexit, as it represents a step towards harmonizing regulatory frameworks between Europe and the UK. This move is expected to facilitate smoother integration of AAM technologies and strengthen aviation relationships across borders. In addition to the UKCAA's potential alignment, EASA has recently published an updated version of its Special Conditions for Vertical Take-Off and Landing Aircraft (SCV) document. This revision introduces greater flexibility in certification processes, which is crucial for adapting to the rapidly evolving AAM landscape. In the Middle East, particularly in Dubai, the regulatory approach is also advancing. The UAE General Civil Aviation Authority (GCAA) is working towards integrating regulations -

for both heliports and eVTOL operations into a unified framework. This consolidation is expected to streamline regulatory processes and foster a more cohesive regulatory environment for AAM operations. Silvestri anticipates that other regions follow suit, creating comprehensive might regulations that encompass various aspects of AAM infrastructure.

Despite these positive developments, Silvestri stressed the ongoing need for advocacy regarding public and societal acceptance of AAM technologies. Drawing on his experience with Skyports, he highlighted the importance of educating local governments and communities about the benefits of AAM, including economic growth, job creation, and environmental sustainability. Public acceptance remains a critical barrier, and efforts must be directed towards demonstrating the tangible benefits of AAM technologies to local councils and municipalities. He concluded by underscoring the need for continued advocacy and education to promote the adoption of AAM technologies. He emphasized that as the industry evolves, engaging with stakeholders and addressing public concerns will be essential for fostering a supportive regulatory and societal environment.

Giancarlo Silvestri, provided a comprehensive overview of recent regulatory advancements in AAM and the ongoing efforts required to achieve broad acceptance. His insights highlight the dynamic nature of the sector and the importance of collaboration between regulatory bodies, industry stakeholders, and the public to drive the future of air mobility.

MIDDLE EAST & AFRICA



BOTSWANA

LIAISON: MARANG MBAAKANYI

Chair, Board of Liaisons - Summer 2024

in Connect on LinkedIn

"IN BOTSWANA, DRONES FOR SEARCH AND RESCUE PROVIDE CRITICAL AID IN HARD TO REACH AREAS."

Botswana is steadily embracing the transformative potential of drones and advanced air mobility (AAM) technologies, although it lags behind some global trends. Marang Mbaakanyi, CEO of Drones for Africa, highlighted both the progress made and the challenges that remain in Botswana's AAM landscape. Drones for Africa, based in Gaborone, serves as a hub for drone sales, training, repairs, and data analysis. Mbaakanyi emphasized that while Botswana's adoption of AAM technologies has been slow, recent shifts in the use cases for drones are paving the way for broader acceptance. Notably, the deployment of drones for emergency responses and disaster management has demonstrated their vital role in saving lives in remote areas where access to medical help is often delayed.

One of the significant advancements in Botswana is the use of drones for delivering medical supplies to hard-to-reach regions. In crisis situations, drones have proven invaluable in providing timely aid, with the potential to expand their use for routine medical deliveries. This capability is particularly crucial in a country where many people live in remote areas and have limited access to healthcare.

Botswana is also seeing the use of drones in search and rescue operations. Mbaakanyi shared a poignant story where drones played a crucial role in locating a young man battling depression, who had gone missing. Traditional methods, including helicopters, were costly and time-consuming, but drones were able to find the individual within hours, underscoring their effectiveness and potential in life-saving operations. On the regulatory front, Botswana is still catching up. Mbaakanyi noted that while the country is behind in terms of regulations and policies governing drone operations, there have been significant strides in the past few months. The government is currently reviewing existing regulations and plans to introduce new policies aimed at enhancing the efficiency and safety of drone operations. Importantly, these upcoming regulations are being developed in consultation with stakeholders and experts to ensure they meet industry standards and promote innovation in the AAM sector.

However, public acceptance remains a challenge. Mbaakanyi pointed out that while there haven't been significant protests or acts of vandalism against drone technology, there is still a general wariness among the public. Privacy concerns, particularly regarding surveillance and data security, are prominent issues that need to be addressed through public education and transparency.

In a bid to further drive the conversation around AAM in Africa, Mbaakanyi announced plans to host the largest conference on the continent. This event aims to bring together stakeholders, researchers, and innovators to share knowledge and advance the agenda in Africa. She called on global partners to join in this effort to educate the public, foster innovation, and create a regulatory environment that supports sustainable growth in the sector. As Botswana moves forward, the collaborative efforts of industry leaders, government, and the public will be crucial in shaping a future where drones and AAM technologies play a pivotal role in improving lives and boosting the economy.

LIAISON: LOUISE JUPP

Connect on LinkedIn



While drone corridors are being conceptualized in various parts of South Africa, these projects are still in the exploratory stages. The potential for these corridors to facilitate UTM and AAM development in the future is acknowledged, but concrete progress has vet to be made. The Head of the South African Civil Aviation Authority is expected to present at the upcoming ICAO symposium on AAM in September 2024. This may signal a potential shift in perceptions of AAM and its potential in South Africa at higher levels. Since January 2024, there have been no significant new laws or policies directly impacting AAM or UAS in South Africa. The regulatory landscape remains focused on the integration and expansion of sUAVs. A notable legal development occurred in July when the Supreme Court upheld the ban on using drones for recreational fishing, citing marine conservation reasons. However, this ruling does not directly impact the AAM sector.



The potential value of AAM in South Africa has yet to be fully explored, particularly in terms of viable use cases, public acceptance and concerns such as noise pollution. The drone industry, although small and consolidating, is gaining recognition for its applications in security, agriculture, mining, and surveying. As the industry grows, so too does public interest, albeit primarily within these specific sectors. The potential applications of AAM in South Africa, such as transportation between airports and cities or tourism sites like National Parks, may have potential in due time.

However, initial efforts to foster government and public acceptance of AAM might be better directed towards medical or humanitarian uses. For example, using eVTOLs for air ambulance services or supporting first responders could pave the way for broader acceptance and subsequent expansion of AAM into other sectors. Drawing from military developments in countries like the USA and UK, where emerging aviation technologies are being used to support field hospitals and evacuate personnel, could provide a valuable blueprint for civilian AAM applications in South Africa. A focus on medical or humanitarian applications may serve as a stepping stone towards wider adoption and integration of AAM technologies in the country.

"PUBLIC AWARENESS IN SOUTH AFRICA REGARDING AAM IS LARGELY UNDERDEVELOPED, WITH INTEREST PRIMARILY CONCENTRATED IN THE EXISTING UAS INDUSTRY."

RWANDA

Rwanda may not yet be a global leader in aviation, but it has made significant strides in positioning itself within the industry, particularly in Uncrewed Aerial Systems (UAS). Though its aviation history is relatively recent, Rwanda is gaining a reputation as a forward-thinking and innovative player, focusing on becoming a hub for drone technology. The country has created a conducive environment for companies to test and develop UAS solutions.

"RWANDA'S FAVORABLE REGULATORY ENVIRONMENT AND COMMITMENT TO INNOVATION HAVE MADE IT AN ATTRACTIVE LOCATION FOR AAM ACTIVITIES, WITH THE GOAL OF ESTABLISHING ITSELF AS A PREMIER TESTING HUB FOR DRONE TECHNOLOGY."

Rwanda maintains a strong emphasis on safety, innovation, and integration into the broader airspace. The Rwanda Civil Aviation Authority (RCAA) is the key body responsible for implementing and overseeing UAS regulations. Rwanda has been actively working with international bodies, such as the International Civil Aviation Organization (ICAO) and the African Civil Aviation Commission (AFCAC), to develop a robust regulatory environment that aligns with global standards while supporting unique regional needs.



Rwanda's UAS cluster is in its early stages but is rapidly growing, with a focus on three sub-clusters: Hardware, Services, and Software. While the Services sub-cluster currently has the most companies, the Hardware and Software sectors are emerging with significant potential. Rwanda aims to position itself as a leader in drone technology by creating a supportive ecosystem for innovation and development. The country's strategic location and investment-friendly policies have attracted companies to explore UAS opportunities within its borders.

Though Rwanda has not yet established major success cases in the UAS sector, the government and the RCAA are actively engaging with international companies to conduct test flights in the country. Rwanda's favorable regulatory environment and commitment to innovation have made it an attractive location for these activities. The country's goal is to establish itself as a premier testing hub for UAS, leveraging its experience in other technologydriven sectors to support the growth of this industry.

Rwanda's membership in regional and international organizations, coupled with its progressive policies, presents an opportunity to lead in the development of UAS technology in Africa. The country is particularly focused on creating U-Space test zones, working with the Rwanda Air Traffic Service Authority, and attracting international investors to build the necessary infrastructure for UAS operations. By fostering a collaborative environment with industry leaders, Rwanda is setting the stage to become a key player in the global UAS market.

LIAISON: VIRGINIE UWIMANA

Namibia, a vast country with a population of just over 3 million, is making strides in the field of uncrewed aviation. With a population density of just 3 to 4 people per square kilometer, Namibia is one of the world's most sparsely populated countries. This unique landscape presents both opportunities and challenges for the development of advanced air mobility, particularly in rural areas.

A significant milestone for Namibia's uncrewed aviation industry is the recent establishment of Approved Training Organizations (ATOs). These local institutions, including organizations like Flying Labs, will soon start training pilots locally, fostering homegrown talent and building the foundation of a robust drone ecosystem. This development is crucial for increasing local capacity and ensuring that Namibia is not left behind in the global race towards advanced air mobility.

The regulatory landscape is also evolving. The Namibian Civil Aviation Authority has drafted the Namibian Civil Aviation Technical Standards (NamCATS) Part 101, which focuses on drone operations. This draft is currently open for industry comments and review, allowing stakeholders to provide input that could shape the future of drone regulations in the country. However, the industry faces challenges, including the inability to convert foreign drone licenses to local ones and complications with obtaining approvals for Beyond Visual Line of Sight (BVLOS) operations.

The regulatory hurdles, particularly those related to BVLOS operations, are a significant concern for the industry. A recent audit highlighted the need for more trained personnel within the Civil Aviation Authority to handle BVLOS applications. This limitation is currently restricting the broader use of drones, particularly in areas like disaster response, where drones could play a critical role.



In response to these challenges, industry stakeholders have called for the development of an online platform for drone approvals to streamline the process. They also emphasized the need for continuous co-creation sessions to keep pace with industry trends and ensure that regulations are both relevant and effective.

Despite these challenges, Namibia is poised to take significant steps forward. The country is looking to launch its first medical cargo delivery service using drones, which could revolutionize healthcare delivery in remote areas. In addition, drones are being considered for disaster mitigation, land degradation monitoring, and mapping informal settlements. Namibia's commitment to involving the youth in these initiatives is also commendable. By engaging young people, the country is ensuring that the next generation is prepared to take the reins in the growing field of uncrewed aviation.

In conclusion, Namibia's uncrewed aviation industry is at a critical juncture. With the right partnerships and continued regulatory development, the country has the potential to become a leader in advanced air mobility in Africa. Namibia invites humanitarian, educational, and technology partners to join this journey and help shape the future of uncrewed aviation in the region.

"NAMIBIA IS LOOKING TO LAUNCH ITS FIRST MEDICAL CARGO DELIVERY SERVICE USING DRONES, WHICH COULD REVOLUTIONIZE HEALTHCARE DELIVERY IN REMOTE AREAS."

MALAW

LIAISON: DEBORA MTAMBALIKA

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"THE INTRODUCTION OF THE FLYING AMBULANCE IN MALAWI IS A CRITICAL ADVANCEMENT, AIMING TO DELIVER MEDICAL SUPPLIES TO AREAS WHERE REMOTE COMMUNITIES OFTEN STRUGGLE TO ACCESS TIMELY HEALTHCARE."

Malawi is making significant strides in the field of advanced air mobility, particularly through the innovative use of uncrewed aerial systems (UAS). Debora Mtambalika, representing Malawi as a liaison, highlighted the country's recent developments in this sector, emphasizing the potential for UAS to transform healthcare delivery and other critical services.

One of the most notable advancements in Malawi is the introduction of the "flying ambulance," a project led by the international organization Bring Me Hope. This advanced air system is currently being tested to deliver medical supplies to hard-to-reach areas, a critical need in a country where remote communities often struggle to access timely healthcare. Additionally, Swoop Aero, a company established in Malawi since 2020, is advancing its UAS capabilities with the introduction of new drones like the Kite and Wingcopter, the 198 eVTOLs, which are capable of carrying payloads of up to 5 kilograms.

On the local front, Malawi is witnessing a surge in drone innovation. Local enterprises are increasingly using indigenous technology to support medical deliveries, partnering with international health organizations to address urgent healthcare needs. The African Drone and Data Academy is also contributing to this growth by producing a new generation of drone service providers, further fueling the industry's expansion. The impact of these developments is particularly evident in the healthcare sector. For instance, drone technology has played a pivotal role in the successful delivery of COVID-19 vaccines and other critical medical supplies, such as cholera vaccines, to remote areas. These efforts have not only improved healthcare outcomes but have also heightened public awareness and acceptance of drone technology.

However, regulatory challenges remain a significant hurdle. Malawi's Department of Civil Aviation is still in the process of developing comprehensive drone regulations. The absence of clear guidelines creates an uncertain environment for both local and international investors looking to enter the market. Despite this, the Malawian government has shown a strong interest in adopting drone technology for various applications, including border security and conservation efforts in national parks.

The public sentiment towards drones in Malawi is overwhelmingly positive, with communities and local leaders showing eagerness to engage in the ongoing technological developments. As the UAV industry continues to expand, balancing the opportunities and challenges will be crucial to ensuring sustainable growth.

Debora, through her consultancy work, is actively seeking donor support to further research and address the challenges faced by local drone providers. She believes that with the right support, Malawi can continue to advance in this promising field, ultimately achieving a sustainable UAS industry that benefits all sectors of society.

NIGERIA

LIAISON: PHILIPS DUROJAIYE

Nigeria, with its vast population of 218 million and a GDP of \$472 billion, stands at a critical juncture in its transportation evolution. Philips Durojaiye, team lead at Cyclan Air Mobility, highlights how the country can leapfrog its infrastructural challenges by embracing Advanced Air Mobility (AAM).

Durojaiye begins by underscoring the inefficiencies plaguing Nigeria's current transportation infrastructure, a relic of the colonial era that has seen minimal expansion. The costs associated with logistics within the country are staggering. For instance, shipping a 40-foot container from Shanghai to Lagos costs around \$4,000, but moving the same container just 20 kilometers inland within Lagos can cost up to \$3,500. This discrepancy highlights the urgent need for innovative solutions to overcome these logistical bottlenecks.

The lack of adequate infrastructure not only hampers business operations but also leads to significant disparities in pricing between rural and urban areas. Durojaiye illustrates this with examples from Rwanda and Nigeria, where the cost of agricultural products skyrockets in urban centers due to poor logistics, further emphasizing the need for a transportation revolution. According to the World Bank, Africa needs an additional \$38 billion annually for transportation infrastructure, plus \$7 billion for maintenance, just to maintain current levels.

"BY FOCUSING ON REGIONAL RATHER THAN URBAN AIR MOBILITY, NIGERIA CAN BYPASS THE LIMITATIONS OF ITS UNDERDEVELOPED ROAD NETWORKS AND UNDERFUNDED GOVERNMENT RESOURCES, LEADING TO EXPONENTIAL ECONOMIC GROWTH."



However, Durojaiye suggests that instead of relying solely on traditional infrastructure development, Africa could pioneer a new model through AAM. This model promises low-cost, fast, and futuristic transportation that could significantly reduce the continent's infrastructure deficit and drive economic growth. AAM technologies, as demonstrated by Zipline's successful drone deliveries in Africa, could see faster adoption on the continent than in more developed regions like the U.S. or Europe. Durojaive predicts that in the next decade, Africa needs to build vertiport infrastructure, establish certification and benchmark these programs, against international standards to fully capitalize on AAM's potential.

Through simulations, Durojaiye's team projected that deploying 10 vertiports and 14 aircraft in a single Nigerian city could generate \$13 billion in economic activity over five years. This represents a significant opportunity for a country where the GDP is just over \$400 billion. By focusing on regional rather than urban air mobility, Nigeria can bypass the limitations of its underdeveloped road networks and underfunded government resources, leading to exponential economic growth.

In conclusion, Durojaiye calls for a strategic shift towards AAM, not just as a transportation solution, but as a catalyst for economic transformation. By approaching vertiports as real estate investments rather than purely aviation projects, Nigeria and Africa at large can pave the way for a new era of mobility and prosperity.

LIAISON: ROSE FUNJA

Rose Funja, Tanzania's liaison for advanced air mobility, recently provided an insightful update on the state of drone technology in Tanzania. Despite being less advanced compared to some other regions, Tanzania is making notable strides in integrating uncrewed aerial vehicles (UAVs) into various sectors, albeit with some challenges.

Tanzania, a country known for its rich natural heritage, from Mount Kilimanjaro to the pristine beaches of Zanzibar and the Big Five wildlife, is now stepping into the realm of drone technology. With a population of 65.5 million, Tanzania's economic hub is in Dar es Salaam, while the political capital is Dodoma. In recent months, Tanzania has seen significant progress in the drone sector, particularly with the acceptance of Bevond Visual Line of Sight (BVLOS) operations by the aviation authority. This marks a crucial step forward, enabling the use of drones for surveillance, cargo delivery, and other applications that were previously restricted. However, this progress also highlights the need for further regulatory development and capacity building among professionals in the sector.

Legislation is another area where Tanzania is making headway. The country has enacted privacy and data protection laws, which are particularly relevant for drone operators using UAVs for data collection and photography. Additionally, airspace integration policies are being developed, which will help structure the growing drone industry. However, Rose pointed out that these regulations, while necessary, are sometimes viewed by the public as barriers to entry rather than enablers, especially given the high costs associated with becoming a licensed drone pilot in Tanzania.

Public sentiment towards drones in Tanzania is still evolving. Most people associate drones primarily with video recording at large events, and the broader applications are not yet widely understood.



Concerns about security, data privacy, and the restrictive nature of regulations are common, which may hinder broader acceptance and use of drones. Rose Funja's work at Altitude Drones exemplifies the potential of UAV technology in Tanzania. Her company leverages both drone and satellite data across various sectors, including telecommunications, agriculture, construction, and energy. Despite these advancements, challenges remain. The regulatory environment, while developing, is still in its early stages. Privacy and security concerns persist, and there are significant infrastructure and technology gaps. Most Local drone manufacturing is virtually nonexistent, making the industry reliant on external technology.

Rose sees significant opportunities for drones in Tanzania, particularly in agriculture, infrastructure development, and health. UAVs can play a crucial role in transporting goods to remote areas, aiding disaster management, and enhancing agricultural productivity. However, to fully realize these opportunities, Tanzania must continue to address regulatory, technological, and infrastructural challenges. As the country navigates these hurdles, the drone sector in Tanzania holds great promise for contributing to the nation's economic and technological growth.

"IN TANZANIA, AAM IS USED FOR EVERYTHING FROM CREATING DIGITAL TWINS OF TELECOM TOWERS, SPRAYING PESTICIDES IN AGRICULTURE, AND SURVEYING POWER LINES."



LIAISON: NALULE MARY SANDRA

Uganda stands at the forefront of embracing Advanced Air Mobility (AAM) technologies, showcasing promising developments in various sectors. In a recent discussion, Mary Nalule from Uganda provided insightful updates on the progress and opportunities in this emerging industry.

Uganda, with a population of approximately 50 million, is actively exploring the integration of drone technology into critical industries. A significant partnership has been established between local stakeholders and Unlimited Webex, aiming to enhance the nation's military and industrial capabilities. This collaboration includes the establishment of a comprehensive workshop and a cutting-edge research and innovation center. The center is expected to play a pivotal role in developing new technologies and bolstering investment opportunities within the country.

"DRONE TECHNOLOGY IS BEING USED TO TRANSPORT MEDICAL SUPPLIES, SUCCESSFULLY LAUNCHED AT MAKERERE UNIVERSITY IN UGANDA."

Drones are already making a substantial impact in Uganda's healthcare sector. These drones are delivering medical samples to the western districts, highlighting the technology's potential to revolutionize healthcare delivery in remote and underserved areas. Regulatory frameworks have been put in place to govern the safe and secure operation of drones. Since 2022, Uganda has adopted laws covering aspects such as licensing, registration, and operational guidelines. These regulations are designed to promote safety while encouraging the growth of the drone industry.



Environmental impact assessments have become mandatory, ensuring that drone operations are conducted sustainably. The taxation of drone services is another area of focus, aimed at generating revenue while fostering industry growth. This includes taxes on various drone services, such as surveying and cargo transport.

Public sentiment towards these advancements has been overwhelmingly positive. There is a growing interest among Ugandans in learning about drone technologies and their applications. This positive sentiment is further reflected in the increasing number of discussions around AAM technologies, signaling a bright future for the industry in Uganda.

Looking ahead, Uganda is poised to expand the application of drones, particularly in cargo transport and medical deliveries. Ongoing projects, such as the use of drones for pipeline monitoring, demonstrate the versatility and importance of this technology in various sectors. The country is also actively seeking investment and partnership opportunities to further advance its AAM initiatives.

In conclusion, Uganda's journey towards integrating advanced air mobility technologies is marked by collaboration, innovation, and a commitment to sustainable development. As the nation continues to explore and adopt these technologies, the potential for economic growth and improved infrastructure is immense. The future of AAM in Uganda is promising, and the ongoing efforts will undoubtedly contribute to the country's overall progress and development.

LIAISON: SUKHVIR MAVI

Saudi Arabia is making significant strides toward becoming a global leader in advanced air mobility (AAM), driven by its ambitious Vision 2030 plan. This initiative, launched in 2016, aims to diversify the nation's economy away from oil dependency by investing heavily in sectors such as tourism, technology, and entertainment. Key projects under this vision, such as NEOM, the Red Sea Project, and King Salman Airport, are not only reshaping the country's infrastructure but also setting the stage for Saudi Arabia to become a hub for AAM innovation.

Vision 2030 is a cornerstone of the nation's transformation, and aviation is at the heart of this shift. The country's population of 37 million and a GDP exceeding \$1 trillion highlight its economic strength, with aviation contributing \$21 billion to the GDP. The introduction of mega-projects like NEOM (a \$500 billion smart city project) demonstrates Saudi Arabia's commitment to becoming a leader in future mobility solutions. The Kingdom's aviation sector is undergoing significant changes, with the General Authority of Civil Aviation (GACA) establishing a governance framework to development. support AAM This includes partnerships with international companies, such as the collaboration between Helicopter and Terrafugia to pilot AAM technology initiatives in Jeddah, and the launch of vertiport infrastructure pilot programs led by Skyports.

Over the past year, Saudi Arabia has achieved several milestones in AAM. In the first quarter of 2024, Joby Aviation conducted its first test flight in Riyadh, supported by GACA, to gauge public sentiment and assess feasibility. This was followed by the Future Aviation Forum, an international event hosted by GACA, which brought together regulators, industry leaders, and the public to discuss the expansion of AAM not only in Saudi Arabia but across the Middle East.



Key partnerships have emerged as a result of these initiatives. Notable collaborations include Neom's alliance with Volocopter and the Red Sea Development Company's partnership with Joby Aviation. Additionally, Flynas and Eve Air Mobility have signed a memorandum of understanding (MoU) for potential operations by 2026, further solidifying Saudi Arabia's position as a leader in AAM. Public sentiment towards AAM in Saudi Arabia has been largely positive, although there are concerns regarding safety, privacy, and noise pollution—especially among younger demographics in Riyadh and Jeddah. A study by AlixPartners indicated that 70% of residents are in favor of battery-electric vehicles.

"SAUDI ARABIA IS NOT JUST PARTICIPATING IN THE FUTURE OF MOBILITY—IT'S ACTIVELY SHAPING IT."

In June 2024, GACA, in partnership with EHang, conducted an air taxi trial in Mecca, marking a significant step towards integrating AAM into the country's transportation network, particularly for moving pilgrims efficiently during the Hajj pilgrimage. Saudi Arabia's aggressive push towards AAM under Vision 2030, supported by substantial government investment and strategic partnerships, positions the Kingdom as a global leader in this emerging field. With ongoing regulatory enhancements and infrastructure development, Saudi Arabia is on track to launch AAM operations by 2026, setting a benchmark for future mobility solutions worldwide.

JORDAN

LIAISON: RA'AD SHEHADEH

The Hashemite Kingdom of Jordan, with its capital in Amman and a population of 11.29 million, is emerging as a significant player in the drone and air mobility sector. With a GDP of \$53 billion, Jordan is leveraging its strategic position and innovative youth to push forward in this rapidly evolving field. One of the major developments in Jordan's air mobility industry is the close collaboration between the Jordanian Civil Aviation Regulatory Commission

and various stakeholders to introduce and develop drone and air mobility technologies.

This partnership has paved the way for significant advancements and the creation of a regulatory framework to support the growth of these technologies in Jordan. In a key legislative milestone, Jordan published its UAS laws, Part 101 and Part 102, in February 2024. These laws provide a comprehensive framework for the safe and regulated use of uncrewed aerial systems in the country. The new regulations are expected to foster innovation while ensuring safety and compliance within the rapidly growing industry. Public sentiment towards drones and advanced air mobility in Jordan is overwhelmingly positive.



Educational institutions like Al Hussein Technical University (HTU) and the Crown Prince Foundation (CPF) play a crucial role in nurturing this enthusiasm. For example, the HTU AeroSquad, a youth initiative, has made significant strides in drone development using 3D printing technology. Their recent participation in the 3DPAC competition in Texas, where they achieved the longest flying time and the second-best design, highlights the potential of Jordan's youth in this field.

Looking ahead, Jordan is planning to implement a flying taxi project that will include the construction of nine hub stations and vertiports to connect the northern, central, and southern regions of the country. This initiative aims to boost tourism, medical services, and transportation. Additionally, Jordan is positioning itself as a potential hub for drone manufacturing in the Middle East, with plans to establish a significant manufacturing facility in its free zone. With a strong regulatory framework, enthusiastic public support, and a clear vision for the future, Jordan is poised to become a leader in the drone and air mobility industry in the Middle East.

"THE YOUNGER GENERATION IN JORDAN EMBRACES AN OPENNESS TO NEW TECHNOLOGIES, PARTICULARLY THOSE WHO ARE LEADERS IN HIGH-TECH INDUSTRIES."

LIAISON: FAHAD AL RIYAMI

Oman is rapidly advancing in the field of Advanced Air Mobility (AAM) and Uncrewed Aerial Systems (UAS), with several notable developments shaping the country's aviation landscape. Fahad Al Riyami, founder of the eVTOL company AeroVecto.

Oman, a coastal country on the Arabian Peninsula with a population of 4.5 million, is recognized for its diverse geography, including deserts, mountains, and lush green landscapes. The country's economy is primarily driven by oil production, fishing, and tourism, with a GDP of approximately \$200 billion.

"OMAN IS POSITIONING ITSELF AS A SIGNIFICANT PLAYER IN THE AAM SECTOR.".

One of the key milestones in Oman's UAS sector is the launch of the first Omani-made drone. In the coming year, Odys Aviation, in collaboration with the local public transport company Mwasalat, will begin eVTOL logistics trials. These trials are a crucial step towards integrating eVTOL technology into Oman's transportation infrastructure. Additionally, companies such as Esbaar, Star Drones and the Ibn Firnas Drone Center are already implementing UAS solutions in the energy and agriculture sectors, demonstrating the practical applications of drone technology in various industries.

On the software side, local companies are developing traffic management systems and surveillance applications for UAS management. This includes drone delivery trials for parcels and food, further showcasing Oman's commitment to leveraging drone technology for everyday services. Notably, AeroVecto, the country's first eVTOL Original Equipment Manufacturer (OEM) is actively working on developing aircraft for public transport, which signifies a major step towards urban air mobility in Oman.



The Omani Civil Aviation Authority (CAA) is at the orefront of regulating this burgeoning sector, and has introduced comprehensive regulations covering operations, use cases, training, licensing, and certification for UAS. These regulations are designed not only to promote innovation but also to ensure the safe integration of AAM and UAS technologies in Oman. The Omani government's active support of AAM initiatives, both through its own trials and partnerships with the private sector, underscores its commitment to this emerging industry.

Public sentiment towards AAM in Oman is increasingly positive, with growing acceptance of UAS technologies in areas such as search and rescue operations and agriculture. However, there are concerns related to noise pollution, privacy, and safety, which are common challenges faced globally. The CAA is actively working on noise abatement procedures, and community efforts, including public events and training programs, have been effective in addressing some of these concerns. Fahad Al Riyami's own company, AeroVecto, is contributing to this evolving landscape by developing eVTOL aircraft specifically designed for mass public transit. These aircraft, capable of carrying 15 to 18 passengers, aim to serve as an alternative mode of public transport.

In summary, Oman's AAM ecosystem is evolving with promising opportunities on the horizon. While challenges remain, particularly in the areas of regulation, privacy, and safety, the country is well on its way to becoming a leader in AAM technology in the region. As the sector matures, Oman is expected to make significant strides in integrating AAM and UAS technologies across various industries.

UAE

LIAISON: WASSAF AKHTAR

"DUBAI, KNOWN FOR ITS FUTURISTIC VISION AND RAPID DEVELOPMENT, IS LAYING A STRONG FOUNDATION FOR AAM. RESIDENTS ARE ENTHUSIASTIC ABOUT THE POTENTIAL FOR ENHANCING CONNECTIVITY."



The UAE is making remarkable strides in the field of Advanced Air Mobility (AAM), driven by a vision of innovation and technological advancement. Wassaf Akhtar, Chief Strategy Officer at Air Chateau, Consultant to Kookiejar of Sweden, provides an indepth look at local efforts and future goals in this exciting sector. The city has been proactive in embracing this technology, starting with the early adoption of Volocopter's eVTOLs in 2017, which showcased the potential of aerial taxis. This initiative reflects Dubai's commitment to transforming its urban mobility landscape and integrating cutting-edge technologies into its transportation network.

At the heart of these advancements is Dubai Helipark, which has emerged as a crucial player in the AAM ecosystem. The facility, located in Dubai, boasts a state-of-the-art heliport with nine parking pads and a hangar capable of accommodating up to 12 eVTOLs. This infrastructure is complemented by a 6-megawatt charging station, designed to support the simultaneous charging of multiple eVTOLs. These developments underscore Dubai's readiness to support and scale up eVTOL operations.

The UAE government, through the General Civil Aviation Authority (GCAA), is spearheading several regulatory and policy advancements to facilitate the growth of AAM. New regulations are being proposed to standardize hybrid heliport infrastructure, ensuring that existing heliports can accommodate both traditional helicopters and new eVTOLs. Additionally, the GCAA is working on training programs to certify personnel and develop standards for both helicopters and eVTOLs, reflecting the country's commitment to safety and operational excellence. Public sentiment in Dubai towards AAM is overwhelmingly positive. Surveys reveal that a significant majority of the population is receptive to the idea of eVTOL services, viewing them as a viable solution to urban transportation challenges. This positive outlook is driven by Dubai's broader vision of becoming a smart city and a leader in technological innovation. Despite these advancements, challenges remain. Ensuring safety and managing regulatory complexities are ongoing concerns. Dubai is addressing these by conducting impact studies on grid responses to high power demands, evaluating downwash effects, and continuously updating operational protocols.

Looking ahead, Dubai is focused on further optimizing its AAM infrastructure and operations. This includes installing additional electric charging facilities, refining hybrid marking for eVTOLs, and enhancing training programs for personnel. Dubai's proactive approach and strategic planning position it as a global leader in advancing air mobility, paving the way for a future where urban air travel becomes an integral part of city life. Wassaf Akhtar's insights highlight Dubai's ambitious and well-coordinated efforts to lead in the AAM sector. The city's commitment to innovation, coupled with its regulatory advancements and public support, sets a strong foundation for the successful integration of advanced air mobility into its urban landscape.

THE AMERICAS

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LIAISON: HECTOR RIDA OLVERA

Vice-Chair, Board of Liaisons - Summer 2024



Hector Rida Olvera delivered an insightful presentation on the first semester of 2024, focusing Mexico's innovation opportunities on and advancements in drone technology. He began with a brief overview of Mexico, highlighting its Federal Republic government. а population of approximately 129 million, and a GDP of \$1.47 trillion. The presentation covered various industry milestones, challenges, and opportunities in gender and technology, agriculture, security, regulations, air surveillance, and educational advancements.

In terms of industry milestones, Hector emphasized the necessity of integrating drone schools into the framework established by AFAC, Mexico's regulatory authority. He pointed out the challenges faced by pilots operating without proper licenses and the need to encourage entrepreneurial efforts within the technology sector. Hector also celebrated gender milestones, mentioning Eduardo Ibresca, an agronomist using drones for crop optimization, and Vicki Montes, a 19-year-old utilizing drones for herbicide spraying on her family's agave field.

Hector highlighted Mexico's advancements in agricultural drone technology, specifically the University of Chapingo's use of RGB images for mango maturity detection and classification. He noted the contributions of these projects to the modernization and sustainability of Mexico's agricultural sector. Regarding security and regulations, Hector discussed the challenges posed by the excessive use of Chinese drones by criminal organizations and the lack of a well-established framework. He called for increased collaboration between the Mexican government and international bodies, such as the Chinese government and the Federal Aviation Administration, to neutralize threats and enhance regulatory measures.

"MEXICO NEEDS A COMPREHENSIVE REGULATORY FRAMEWORK, INFRASTRUCTURE FOR OBSTACLE DETECTION, AND INTERNATIONAL COLLABORATION. THE DEPLOYMENT OF EVTOLS COULD BE AN EFFECTIVE AND BENEFICIAL ADDITION TO MEXICO CITY'S TRANSPORTATION SYSTEM."

Educational advancements were also highlighted, with Hector focusing on the Technological Monterrey's Tech Drone Championships, which encourage students to apply drone technology in real-world scenarios. He acknowledged the positive impact of these initiatives on the educational environment. Hector underscored the importance of careful regulation, international cooperation, and standardization within the industry.

LIAISON: KATHERINE AYRE

In Canada, Advanced Air Mobility (AAM) leadership is pursuing a national and comprehensive approach to AAM adoption. The federal regulator, Transport Canada, is leading the approach along with its AAM Integration Team. The AAM Integration Team works closely with NAV CANADA (Canada's only Air Navigation Service Provider), CAAM (Canadian Advanced Air Mobility) being their country's leading Not-For-Profit in this market space, and AEAC (Aerial Evolution Association of Canada). AEAC is the national industry association representing the remotely piloted aerial systems sector ("RPAS").

With just under 10 million square kilometers of geography, vast parts of it remote, and less than forty million people, Canada will maximize the market benefits of AAM. The country is comprised of over 630 First Nation Communities, Inuit, and Métis. Canada's Truth & Reconciliation Commission of Canada's report lists 94 Calls to Action that government, education and industry can take "to redress the legacy of residential schools and advance the process of Canadian reconciliation" with Indigenous peoples. For the AAM sector, Call to Action #92 of the Truth & Reconciliation Report is relevant and applicable as it calls upon the Canadian corporate sector to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. Laws and policies are developing, in recognition with Call to Action #92, at the federal level with significant input by Transport Canada's AAM Integration Team, including a deep analysis of section 5.81 of the Aeronautics Act, R.S.C. 1985, c. A-2. This is a highly technical provision contemplating the regional and urban planning intersection with aviation, and necessary for AAM.



March of 2024, a Transport Canada In commissioned and made public a report titled "Public Opinion Research Study on Examining the Social Acceptance of Advanced Air Mobility by the Canadian Public". This public sentiment study was a modest in scope. Of the respondents questioned about their AAM views in urban areas, the highest level of comfort was with Search and Rescue operations at 81%. Further, the public described Firefighting (78%), Emergency Medical (78%), Aerial Surveying/Inspections (70%) and cargo transport (60%), as favourable UAM operations. The remoteness of Canadian geography heavily favours RAM deployment first. In May of 2024, through Espace Aéro in Québec, there was an announcement of \$415m in planned investment, including \$240m invested by Boeing for that province. In June of 2024, Pivot Airlines launched in Ontario with the support of Smart Green Aviation Group, as a Canadian enterprise focused on RAM. These two companies are playing key roles in the equitable deployment of aircraft and infrastructure, including innovative technology, under the Connect Airlines brand. The RPAS sector continues to grow, with new and significant lower risk BVLOS and higher payload operation regulation provisions anticipated in 2025. As of June 2024, there were 104,998 Basic Pilot Certificates and 14,030 Advanced Pilot Certificates issued for RPAS operations. The Canadian AAM market will observe further growth following ICAO's First Advanced Air Mobility Symposium, held at the ICAO headquarters in Montreal, Canada in September 2024 and AEAC's national conference held in Ottawa, Canada, in November 2024.

LIAISON: PAULA VELANDIA CONGOTE

"COLOMBIA WELCOMES INTERNATIONAL COLLABORATION, INVESTMENT, AND IDEAS TO JOINTLY SHAPE THE FUTURE OF AVIATION IN LATIN AMERICA."

Colombia is making significant strides in the field of uncrewed aerial aviation, positioning itself as a regional leader in advanced air mobility. Paula Velandia Congote, representing UAV MASTERS, has highlighted the country's progress and the crucial role it plays in this rapidly evolving industry.

In recent years, Colombia has been working diligently to integrate uncrewed aerial vehicles (UAVs) into its airspace, starting with the creation of designated testing areas by Aerocivil, the national aviation authority. A landmark event took place in La Guajura, where the first Beyond Visual Line of Sight (BVLOS) test flight was conducted in collaboration with an American company. This successful test not only marked a significant milestone but also positioned Colombia as an attractive destination for international companies interested in drone delivery services and technological development.

UAV MASTERS has been at the forefront of this transformation, partnering with leading organizations like Iowa and AeroAuto Global, TruWeather & VOTIX to conduct feasibility studies and leverage technological expertise. These collaborations aim to create tailored solutions for Colombia, enhancing the country's capabilities in drone operations and infrastructure development.

Public awareness and interest in drone technology are growing in Colombia.



A recent event involving the Chinese company Ehang, although the aircraft could not fly due to regulatory constraints, sparked public curiosity and opened discussions about the future of such technologies in the country. Local companies like Pelagus Drones are also contributing to this momentum, showcasing their expertise in BVLOS operations and demonstrating the capabilities of Colombian aerial vehicles to authorities. Furthermore, the government in Medellín has shown strong support for the development of vertiports, which are essential for the integration of eVTOLs (electric vertical takeoff and landing vehicles) in urban areas.

A significant regulatory advancement occurred in September 2023, when Colombia's National Aviation Agency issued new regulations for uncrewed aircraft, including specific provisions for eVTOLs. This regulatory framework is a major step forward, allowing for the creation of specialized groups within the agency to focus on innovation and of advanced air the integration mobility technologies. Additionally, the introduction of Uncrewed Traffic Management (UTM) systems will enable better coordination of airspace usage between traditional aviation and new aerial technologies.

In conclusion, Colombia is rapidly emerging as a key player in the field of uncrewed aerial aviation. With a supportive regulatory environment, strategic partnerships, and growing public interest, the country is poised to become a hub for innovation and development in advanced air mobility.

LIAISON: RAFAEL DICKSON MORALES

The Dominican Republic, widely known for its thriving tourism sector, is on the brink of a new era in advanced air mobility (AAM). Rafael Rickson Morales, the Dominican Republic Liaison, highlighted the country's nascent but promising journey towards integrating AAM into its infrastructure and economy during a recent presentation.

Currently, the Dominican Republic's air mobility landscape is in its early stages, with no established public policies specifically for AAM. However, discussions and regulatory developments are beginning to take shape. Approximately four years ago, the country implemented its first set of regulations for remotely piloted aircraft systems (RPAS), commonly known as drones. These regulations primarily focus on pilot certification, aircraft registration, operational safety, and liability coverage for third-party damages. The need for these regulations became apparent following an incident where drones were flown near the presidential palace, signaling a wake-up call for the authorities.

While the Dominican Republic currently lacks a domestic industry or developers dedicated to AAM, a significant milestone was achieved this year. The Dominican Institute of Civil Aviation granted a certification to a pension fund company, allowing them to operate an air corridor for drone delivery of documents in urban areas. Although the pilot project has not yet commenced, this certification marks a critical step towards broader adoption of drone technology in the country. Dickson emphasized the potential benefits of AAM, particularly in sectors like document transportation, agriculture, and tourism.





The latter is especially significant given the country's global reputation as a top tourist destination. Integrating AAM into tourism could offer innovative experiences and logistical solutions, further boosting the industry.

The Dominican Republic is also taking legislative steps to accommodate AAM.

"A BILL IS CURRENTLY UNDER CONSIDERATION IN THE CONGRESS OF THE DOMINICAN REPUBLIC TO MODIFY AVIATION LAWS, INCLUDING PROVISIONS FOR THE INFRASTRUCTURE OF AIRPORTS AND THE INTRODUCTION OF VERTIPORTS."

An executive order was recently issued to review and update the nation's aviation legal framework to align with international standards. This would be the first time that the concept and legal definition of advanced air mobility are formally recognized in the country's legislation.

In conclusion, the Dominican Republic is at the cusp of embracing advanced air mobility. With the right regulatory updates and strategic investments, the nation could become a significant player in AAM, particularly by leveraging its robust tourism industry. However, the journey will require substantial political, regulatory, and infrastructural efforts. As Dickson noted, this emerging community of AAM stakeholders will play a crucial role in shaping the future of air mobility in the Dominican Republic.
• ARGENTINA LIAISON: DIEGO GONZALEZ

Argentina is taking significant strides in the field of advanced air mobility (AAM), marking a pivotal moment with the recent inclusion of AAM in its federal legislation. Diego R. Gonzalez, the Argentina Liaison, highlighted the country's progress and ambitions during a presentation, emphasizing that this development represents a major shift in the nation's approach to integrating urban air mobility (UAM) into its broader transportation infrastructure.

As the eighth largest country in the world and a Federal Republic, Argentina has been exploring the potential of advanced air mobility for several years. Diego Gonzalez, part of the team at Corporation America Airports, has been at the forefront of these efforts, focusing particularly on infrastructure and vertiport development. The project is not just limited to Argentina but extends to various parts of the world, with the aim of designing routes and projects that will accommodate the new era of eVTOL aircraft.

A key highlight of the presentation was the recent decree, number 663, which for the first time explicitly includes advanced air mobility within the framework of Argentina's aeronautical code. This new regulation is a groundbreaking development, as it transitions the country from merely having drone regulations to formally recognizing and legislating for urban air mobility. The decree positions AAM as a strategic priority for the Argentine government, signaling its readiness to foster business and investment opportunities in this emerging sector.

"ARGENTINA'S FORMAL RECOGNITION OF ADVANCED AIR MOBILITY IN ITS FEDERAL REGULATIONS IS A SIGNIFICANT MILESTONE."



The current drone landscape in Argentina is robust, with over 1,500 drones registered with the Civil Aviation Authority. These drones are primarily used in sectors like surveillance and agriculture. However, with the new legislation, the focus is expected to expand significantly to include advanced air mobility, paving the way for the integration of uncrewed aerial systems into the national airspace. One of the notable points Diego Gonzalez made is the necessity for a fair balance between operational efficiency, national defense, safety, and the interests of both the state and private sectors. The new legislation aims to facilitate the development of AAM while ensuring that these critical aspects are carefully managed.

Looking ahead, Argentina is set to continue its leadership in the region with upcoming events such as the second edition of the AAM Congress, organized by Flight Edge, and the ongoing efforts in academic training focusing on UAM law and regulations.

In conclusion, Argentina's formal recognition of advanced air mobility in its federal regulations is a significant milestone. Diego Gonzalez believes that to fully capitalize on this progress, AAM laws should eventually evolve into a separate body of legislation, distinct from traditional aviation law. This approach would streamline the industry's growth and ease its integration into society, reinforcing Argentina's position as a land of opportunity in the rapidly evolving world of advanced air mobility.

LIAISON: LARISSA PAGANELLI

Brazil is emerging as a key player in the Advanced Air Mobility (AAM) sector, thanks to its bustling aviation landscape and innovative industry developments. During a recent presentation, Larissa Paganelli, our Brazil liaison, and Fernanda Siniscalchi, advisor at the AAM Institute, highlighted the opportunities and challenges facing Brazil as it navigates the complexities of AAM integration.

Brazil is a nation with a highly active air traffic network, particularly in major cities like São Paulo and Brasília. São Paulo, in particular, boasts one of the world's largest helicopter fleets, underscoring the country's reliance on air mobility. With this in mind, Larissa emphasized the significant potential for AAM applications across various sectors, including urban air taxi services, cargo logistics, medical transport, tourism, and airport shuttles. These applications could substantially reduce travel times, especially in regions plagued by heavy traffic, improve connectivity to remote and and agribusiness-focused areas, which are vital to Brazil's economy.

On the industry front, Brazil is making strides with three notable eVTOL manufacturers: Vertical Connect, Moya Aero, and Eve Air Mobility. These companies are developing innovative solutions ranging from passenger vehicles to cargo drones, with a focus on sustainable and efficient urban transportation. Eve Air Mobility, part of the Embraer Group, has attracted significant investments and is advancing rapidly, having recently unveiled a fullscale prototype and launched test campaigns.



"BRAZIL EXPECTS TO SEE ITS FIRST CERTIFIED EVTOL OPERATIONS BY 2026, STARTING WITH CARGO AND OFFSHORE APPLICATIONS."

Regulatory challenges are at the forefront of Brazil's AAM development. Larissa highlighted the efforts of ANAC, Brazil's aviation authority, in establishing certification processes and operational guidelines. These efforts include the initiation of eVTOL certification phases and public consultations to shape future regulations. Additionally, the Brazilian Airspace Control Authority is working on creating new airspace classifications and digital flight rules to manage the anticipated increase in air traffic due to AAM operations.

Public acceptance of AAM is also being proactively addressed. Fernanda noted that trials using helicopters to simulate eVTOL operations have yielded positive reactions from the public, particularly in cities like Rio de Janeiro. As AAM technology progresses, integrating it with existing transportation networks remains a priority, with several cities already conducting studies on this front. The AAM Institute, along with its partners, will continue to monitor and contribute to the development of Brazil's AAM ecosystem, ensuring that the country remains at the forefront of this transformative industry.

CHILE

LIAISON: KASANDRA LEIVA

Chile, with its diverse geography stretching from arid deserts to lush forests, is making notable strides in the field of advanced air mobility (AAM). As a long, narrow country with a population of approximately 17.6 million, Chile offers a unique landscape for integrating and developing uncrewed aerial systems (UAS) and other advanced air technologies.

The country's regulatory framework for aviation is robust, with three key institutions overseeing its aeronautical operations: the Civil Aeronautics Board, responsible for air commercial policy under the Ministry of Transport and Telecommunications; the General Directorate of Civil Aeronautics, which manages regulations, services, and air accident investigations under the Ministry of Defense; and the Directorate of Airports, focused on airport infrastructure under the Ministry of Public Works. The evolution of AAM in Chile began gaining traction in 2021 when the Chilean Helicopter Association presented its vision to the then-Minister of Transport and Telecommunications. This laid the groundwork for significant developments in the following years.

By 2022, the Civil Aeronautics Board had approved the creation of a public-private working group led by the General Directorate of Civil Aeronautics. This various stakeholders. group includes from government bodies to private sector entities such as helicopter companies and remote piloted aircraft system (RPAS) operators. In 2023, this working group focused on defining the terms of reference for a study aimed at generating a comprehensive proposal guide for advanced air mobility. The group's efforts are pivotal in creating a roadmap that will shape Chile's AAM landscape, promoting sustainable progress and inclusive dialogue among diverse stakeholders.



Chile's RPAS market reflects its growing interest in advanced air technologies. Between 2015 and 2023, approximately 14,700 operator credentials for remote piloted aircraft were issued, with 3,600 registered RPAS operating under regulations governing air operations and operations over populated areas. Additionally, 361 companies have obtained air operator certificates for RPAS, and 13 organizations hold special operation certificates for nonprofit aerial work.

In terms of traditional aviation, Chile's fleet includes 358 helicopters used for private, commercial, and state purposes, excluding military operations. This number is supplemented by aircraft engaged in wildfire combat during the summer, highlighting the country's diverse aerial needs.

As Chile moves forward, the emphasis is on developing a work plan that balances innovation with sustainability. The active participation of various stakeholders will be crucial in shaping a cohesive strategy for integrating advanced air mobility technologies into the country's existing infrastructure.

> "A COLLABORATIVE APPROACH PROMISES TO PAVE THE WAY FOR A TRANSFORMATIVE ERA IN CHILEAN AVIATION, POSITIONING THE NATION AS A LEADER IN AAM WITHIN THE LATIN AMERICAN REGION."

LIAISON: KIMBERLY ROJAS RUIZ

Advanced Air Mobility (AAM) in Peru is slowly evolving, with a distinct focus on drone applications rather than transportation technologies like electric vertical takeoff and landing (eVTOL) aircraft. This report highlights the key developments in Peru's AAM sector, including regulatory advancements, educational programs, and the economic and social impacts of drone technology.

Peru's AAM regulatory framework is evolving under the General Directorate of Civil Aeronautics (DGAC), which is updating laws and regulations to align with international standards. The DGAC is working with various entities to incorporate global developments. Kev components include registration and certification requirements for commercial drone operators, flight restrictions for safety, and import rules to ensure technology meets standards. These measures aim to create a robust framework for the safe and effective deployment of drones across sectors.

Educational programs and public engagement strategies play a crucial role in fostering a supportive environment for AAM in Peru. Various workshops, seminars, and collaborative efforts have been initiated to increase public awareness and acceptance of AAM technologies. These initiatives aim to educate stakeholders on the benefits and challenges associated with AAM, preparing communities for its integration into urban planning and infrastructure development.

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By equipping the workforce with the necessary skills and knowledge, Peru is laying the groundwork for a sustainable and innovative AAM ecosystem. The integration of drone technology in Peru is poised to bring significant economic and social benefits. Drones can enhance connectivity by improving access to remote and underserved areas, thus bridging important connectivity gaps. In disaster management, they offer crucial support by aiding in emergency response and recovery efforts. Their role in environmental conservation is also notable, as drones assist in monitoring and protecting natural resources.

Peru is making efforts to advance its AAM sector by focusing on drone technology mostly. While progress in regulatory frameworks and aeronautical development has been slow, the growing interest in these technologies is promising and could drive meaningful change. There is still a long way to go, but continued collaboration among government, industry, and educational institutions will be crucial in accelerating advancements. By leveraging this collective effort, Peru can realize the benefits of aerial technology for enhanced connectivity, economic growth, and sustainable development.

"THE GROWING AAM SECTOR IS EXPECTED TO GENERATE NEW JOB OPPORTUNITIES AND STIMULATE ECONOMIC DEVELOPMENT, POSITIONING PERU AS AN EARLY ADOPTER."

PARAGUAY LIAISON: ANDREA SPINELLI

The adoption of drone technology in Paraguay remains in its early stages. Currently, drones are primarily used for recreational activities, film production, and limited law enforcement operations. While there is a visible increase in drone usage, it is mostly confined to specific, narrow applications. The police have started utilizing drones, but the scope of their deployment is restricted by budget limitations, leading to minimal investment in this technology. As a result, drones have yet to achieve widespread integration into either the public or private sectors in Paraguay.

"PARAGUAY STANDS AT A PIVOTAL POINT IN ITS ENGAGEMENT WITH AAM TECHNOLOGY. THE INITIAL STEPS IN ADOPTING DRONES ARE ENCOURAGING, BUT THERE IS A PRESSING NEED FOR A MORE STRUCTURED REGULATORY APPROACH AND POLICY DEVELOPMENT."

Paraguay has established a basic set of regulations governing drone usage, but these regulations are not actively enforced. The current framework is insufficient to accommodate the evolving demands of the drone industry, and no significant updates or comprehensive policies are expected in the near future. This lack of regulatory development hampers the potential growth of the industry and fails to address concerns related to safety, privacy, and broader applications of drone technology.



Public sentiment towards drones in Paraguay is mixed, reflecting both curiosity and concern. On the positive side, there is a growing interest in the recreational use of drones and their applications in enhancing film and media production. However, the limited enforcement of existing regulations and the slow pace of adoption have led to concerns about safety and privacy. This sense of uncertainty is compounded by the absence of new policies that could guide the safe and effective integration of drones into everyday life. The current reliance on drones for recreational purposes and limited law enforcement use highlights both the opportunities and challenges faced by the industry.

Advanced Air Mobility (AAM) remains a distant goal for Paraguay. The country's infrastructure, regulatory framework, and technological readiness are not yet prepared to support the advanced capabilities and integration required for AAM. To move towards this goal, Paraguay must focus on developing comprehensive policies, investing in necessary technologies, and fostering collaboration between government and industry stakeholders. These efforts will be crucial in laying the foundation for AAM and ensuring that Paraguay can eventually integrate these innovations into its transportation and logistics systems.

GUATEMALA LIAISON: SERGIO PLAZA



Guatemala is actively paving the way for the future of Advanced Air Mobility (AAM), focusing on creating a robust framework to support the operation of various manufacturers and their diverse applications. Although relatively new to the global AAM industry, Guatemala is positioning itself as a key player in Latin America by fostering a conducive environment for innovation and technological advancement in this sector.

Guatemala's approach to AAM involves close collaboration with the Dirección General de Aeronáutica Civil (DGAC) and other government authorities. The regulatory framework is being developed to ensure safety, efficiency, and seamless integration of AAM into the country's airspace. This proactive engagement with regulators is aimed at establishing clear guidelines and standards that align with global practices while addressing the specific needs of the region.

Guatemala is focusing on becoming a hub for AAM in Central America. inviting leading global manufacturers to establish operations and test their technologies within the country. By working closely with international companies, the country is setting the stage for a future where AAM plays a significant role in transportation and logistics. The government's support, coupled with strategic partnerships, is driving the development of an ecosystem that encourages innovation and growth in the AAM sector.

Guatemala's strategic location, combined with its commitment to creating a supportive regulatory environment, positions it well to become a leader in AAM in Latin America. The country is actively engaging with industry stakeholders to explore potential applications of AAM, from urban air mobility to cargo delivery and emergency response. By fostering a collaborative environment and leveraging its existing infrastructure, Guatemala aims to establish itself as a regional hub for AAM innovation and operation. The vision for Guatemala is to not only adopt AAM technologies but to lead in their implementation, making the country a model for others in the region.

With ongoing efforts to build a strong foundation for AAM, Guatemala is setting the stage for significant advancements in the sector. The country's focus on regulatory collaboration, technological innovation, and strategic partnerships is paving the way for a future where AAM becomes an integral part of its transportation landscape. The potential for growth in this sector is immense, and Guatemala is poised to be at the forefront of this transformation in Latin America.

> "GUATEMALA IS WELL ON ITS WAY TO BECOMING A CENTRAL HUB FOR THE NEW ERA OF THREE-DIMENSIONAL AIR MOBILITY."

UNITED STATES

LIAISON: CHRIS FERNANDO

"AAM CERTIFICATION IS TAKING LONGER THAN MANY [INVESTORS] ANTICIPATED BUT THE TIMELINE IS NOT A REAL SURPRISE TO THOSE WHO HAVE BEEN IN AVIATION A WHILE."



Chris Fernando, the US Liaison for the AAM Institute, shared an extensive overview of the current landscape of Advanced Air Mobility (AAM) and Uncrewed Aircraft Systems (UAS) in the United States. With over 20 years in aviation, Fernando emphasized significant industry advancements, public sentiments, and the collaborative efforts driving the sector forward.

The Federal Aviation Administration (FAA) and NASA are leading innovation and regulatory updates at the federal level. NASA's research feeds into policy-making, and the Department of Defense (DoD) also contributes through the interagency working group. State and local governments play crucial roles, with significant achievements over the past 12-18 months, including the FAA's "Innovate 28" AAM implementation plan and the launch of the Keysight initiative in Dallas, Texas. This initiative focuses on establishing digital infrastructure for low-altitude airspace management.

Fernando highlighted several noteworthy milestones: the FAA published Engineering Brief 105, providing vertiport development guidance, and various states like North Carolina, Ohio, and Texas are actively developing AAM plans. Additionally, NASA has established research partnerships across various states and countries to further AAM advancements. Several OEM announcements were also shared, showcasing exciting developments. Electra demonstrated its short takeoff and landing (STOL) aircraft, while Joby delivered its first aircraft and is nearing certification. Beta Technologies and Archer achieved full piloted transitions, and Volocopter conducted demo flights in Tampa. Autonomous aircraft developments, such as the Cessna 208 retrofit, are also progressing in the certification pipeline.

Despite these advancements, Fernando outlined several challenges: certification delays, regulatory hurdles at federal, state, and local levels, funding constraints, environmental considerations, and infrastructure development. The workforce development challenge is significant, with a shortage of pilots and other essential personnel.

Looking ahead, Fernando is optimistic about the potential for drone delivery operations to scale within 12-18 months. He also noted the importance of integrating AAM into broader transportation systems and smart city plans. Key to this will be the development of digital infrastructure, public-private partnerships, and addressing environmental and funding challenges. Fernando concluded bv expressing excitement for future mobility innovations and emphasized the potential of AAM to enhance transportation equity and accessibility. He also shared some key media platforms he uses to stay informed about industry developments.

ASIA PACIFIC

SOUTH KOREA LIAISON: **MIN SHIN**



South Korea is making significant strides in the field of Urban Air Mobility (UAM), with a focus on integrating this innovative transportation mode into its urban infrastructure. Min Shin, the South Korea Liaison, recently provided an update on the current state of UAM development in the country, highlighting both progress and the challenges that lie ahead. The South Korean government has been proactive in promoting UAM as a key component of future urban transportation.

"THE RECENT LAUNCH OF VONAER, THE COUNTRY'S FIRST AIR MOBILITY SERVICE, IN JUNE, MARKS A CRITICAL MILESTONE."

The service has garnered significant attention, signaling potential customer interest in transitioning to UAM services in the future. The K-UAM Grand Challenge, which included demonstration flights of eVTOL (Electric Vertical Take-Off and Landing) vehicles, further showcases the country's commitment to this sector. Although the specific eVTOLs for future testing have not been finalized, with candidates like Joby Aviation and Autoflight from Germany under consideration, the groundwork is being laid for substantial developments in the coming years.

In 2023, South Korea enacted the UAM Act, a legislative framework designed to support and regulate the development of urban air mobility. This law provides the legal basis for UAM operations, including special regulatory exemptions and financial support. The government has also established the UAM Team Korea, a collaborative body that includes both public and private stakeholders to ensure the seamless integration of UAM into the national transportation infrastructure.

Key industry players, such as Hyundai and Hanwha, are heavily involved in developing UAM vehicles. While Hyundai has faced some delays, it has made progress by forming a partnership in Indonesia to expand its operations. Hanwha, on the other hand, is dealing with challenges in its collaboration with Overair but remains committed to advancing its eVTOL development. Public perception of UAM in South Korea presents a significant challenge.

A 2023 survey conducted in northern areas revealed that 68.5% of respondents were unaware of UAM, and those who were aware expressed concerns primarily about the high cost and safety of air mobility services. The current pricing of helicopter services, which can range from \$250 to \$300 for a one-way ticket, is seen as prohibitively expensive by many. However, there is a positive outlook among those who recognize the potential of UAM. Many respondents appreciate the speed and convenience that UAM could offer, especially in a city like Seoul, where traffic congestion is a major issue. As more people become familiar with air mobility, it is expected that public trust and interest will grow.

South Korea's journey toward integrating UAM into its transportation system is well underway, with both the government and private sectors working diligently to overcome the challenges. While public awareness and acceptance remain hurdles, the ongoing efforts to develop and demonstrate UAM technology, coupled with regulatory support, suggest a promising future for urban air mobility in South Korea.

CHINA

LIAISON: MARTIN DING

China, officially the People's Republic of China, stands as a significant player in the global economy with its capital in Beijing and a population exceeding 1.4 billion. As the world's second-largest economy, China is making notable strides in the field of Advanced Air Mobility (AAM), often referred to as the "low altitude economy" in the country. This term reflects the nation's strategic push to integrate uncrewed aerial vehicles (UAVs) into its airspace, marking a major shift from previous attempts since 2009. Recent developments highlight China's commitment to advancing AAM. The central government has designated AAM as one of three strategic emerging industries, which has spurred substantial support from both governmental and financial sectors.

This high-level endorsement aims to catalyze growth and innovation within the industry. One of the key achievements in China's AAM sector is the certification of two eVTOL (electric Vertical Take-Off and Landing) aircraft. The EHang 216 and the Cario, produced by EHang, have received significant certifications, including product and manufacturing scale approvals. EHang's successful acquisition of these certifications has led to major sales orders and increased operational scale, particularly in air tourism. In January 2024, China will implement Civil Aviation Regulation Part 92, a comprehensive set of rules governing uncrewed aircraft operations. This regulation covers all aspects of UAV safety and management, setting a new standard for operational protocols in the industry. China's AAM ecosystem has already demonstrated diverse operational use cases. Notably, the EHang 216 has been actively utilized in air tourism, showcasing its practical application in real-world scenarios.



However, the sector's focus remains heavily on uncrewed aircraft systems, with significant efforts directed towards developing regulatory frameworks and operational standards.

Among the various use cases, emergency medical services (EMS) and cargo delivery, particularly within the 25 to 150 kg range, show considerable potential. Despite this, the passenger-carrying segment of urban air mobility (UAM) still faces challenges in scaling, reflecting a cautious but progressive approach.

Albatross AI, led by Martin Ding, is contributing to this burgeoning field by developing innovative avionics solutions. Their Autonomous Flight Assistance System aims to enhance flight safety and operational efficiency within China's low altitude economy. The country's focus on uncrewed systems and operational use cases underscores its commitment to integrating advanced air mobility into its infrastructure. Engaging in global dialogues and harmonization efforts will be crucial for aligning international standards and fostering collaborative progress in this dynamic field.

"CHINA'S APPROACH TO AAM, KNOWN LOCALLY AS THE LOW ALTITUDE ECONOMY, IS CHARACTERIZED BY STRATEGIC GOVERNMENT SUPPORT, REGULATORY ADVANCEMENTS, AND A ROBUST SUPPLY CHAIN."

LIAISON: JENNIFER MESZAROS



"CAMBODIA, ALONG WITH ITS NEIGHBORS, IS WELL-POSITIONED TO SEIZE THE EMERGING OPPORTUNITIES IN AAM TECHNOLOGIES."

The Kingdom of Cambodia is one of the ten member states of the Association of Southeast Asian Nations (ASEAN), a trade bloc that also includes Brunei, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Timor-Leste was granted observer status and in-principle approval for ASEAN membership during the 2022 Summits in Cambodia. ASEAN, with a population of 662 million and a GDP of \$3.2 trillion, plays a crucial role in Asian economic integration. Despite significant economic disparities—Singapore's GDP per capita is roughly \$83,000, while Myanmar's is approximately \$1,150—ASEAN has free trade agreements with six partners in the region. In 2020, all ASEAN members joined Australia, China, Japan, New Zealand, and South Korea in signing the Regional Comprehensive Economic Partnership (RCEP), the world's largest free trade agreement by population, promoting integration between Northeast and Southeast Asia.

Integration and harmonization are central themes in ASEAN's approach, driving efforts to create a cohesive economic community through various regional working groups, despite the diverse economic landscapes of its member countries. Against this backdrop, Cambodia, with a GDP per capita of approximately \$1,750, is positioning itself to capitalize on the emerging potential of advanced air mobility (AAM) as it develops in the region. Indeed, the region is already seeing significant interest from eVTOL players. Eve Air Mobility, for instance, has signed a memorandum of understanding with Singaporebased aviation company Yugo Global Industries to explore the potential for urban air mobility (UAM) and electric-vertical-takeoff-and-landing (eVTOL) aircraft in Southeast Asia. The two sides will focus on analyzing the infrastructure and regulatory requirements for eVTOL operations, including the development of vertiports, service centers, and ground handling facilities. Two airports have been earmarked for further study: the upcoming Techo International Airport near Cambodia's capital, Phnom Penh, which is slated to open in 2025, and Manila International Airport in the Philippines.

Meanwhile, Philippines-based business jet operator PhilJets has inked an agreement with Germany's Lilium to purchase 10 Lilium Jets and collaborate on establishing an eVTOL operation network across the Philippines and other Southeast Asian countries, including Cambodia. The collaboration will prioritize planning routes, connecting key city pairs, and gauging passenger demand for a regional ondemand eVTOL service. Additionally, the two sides will work together to identify suitable locations and partners for landing infrastructure, such as vertiports, while sharing specifications and utilizing Lilium's established network of charging hardware providers. As these projects develop, Cambodia's influence in the regional air mobility sector is likely to expand, contributing to continued advancements across Southeast Asia.

JAPAN

LIAISON: KEISUKE YASUKOCHI

Japan is set to make significant strides in the Advanced Air Mobility (AAM) sector, with pivotal developments and a major international expo on the horizon. From April to October 2025, Japan will showcase its advancements in AAM at the Osaka Expo, marking a key milestone for the industry.

One of the most anticipated highlights is the participation of notable companies like SkyDrive, Joby Aviation, and Skydive. These companies will demonstrate their cutting-edge eVTOL (Electric Vertical Take-Off and Landing) technologies, underscoring Japan's commitment to leading the global AAM market. The Expo is expected to be a platform for international stakeholders to engage with Japan's burgeoning AAM ecosystem.

The Japanese government and local industry players are diligently working on regulatory frameworks and infrastructure to support this emerging sector. Collaborations between Japan's Civil Aviation Authority and international bodies like the FAA, EASA, and ICAO are crucial in shaping concrete regulations for eVTOLs and associated infrastructure, including vertiports. While Japan is currently adopting a regulatory approach influenced by the FAA, it is also integrating relevant aspects from EASA's standards to create a robust certification process.

SkyDrive is notable as the only company in Japan actively developing eVTOLs for commercial use. The company's focus includes urban mobility and applications such as island hopping and access to remote locations, reflecting the diverse use cases anticipated for AAM technologies in Japan. However, Japan's regulatory landscape also emphasizes gradual implementation.



Unlike some regions allowing fully autonomous operations, Japan is initially mandating piloted operations for passenger eVTOLs. This cautious approach ensures safety while the industry and regulatory bodies refine operational standards. Infrastructure development is another critical area of focus. Japanese companies are actively working on building charging stations and vertiports, with several planned around the Osaka Expo site. These facilities will support both SkyDrive's and other companies' operations, facilitating the integration of eVTOLs into Japan's transportation network.

Public perception and regulatory hurdles are pivotal to the successful deployment of AAM technologies. The Japanese authorities are attentive to public concerns about noise and safety, drawing lessons from other global cities like Paris. Engaging with the local communities and addressing their concerns will be essential for the acceptance and successful implementation of AAM solutions.

In conclusion, Japan is positioning itself as a major player in the AAM sector with significant upcoming demonstrations and ongoing regulatory advancements. The Osaka Expo will be a key event to witness the latest developments and innovations in this exciting field. For those interested in the future of transportation, the Expo promises to be an invaluable opportunity to explore Japan's contributions to the AAM industry.

"JAPAN IS POSITIONING ITSELF AS A MAJOR PLAYER IN THE AAM SECTOR WITH SIGNIFICANT UPCOMING DEMONSTRATIONS LIKE WORLD EXPO 2025 AND ONGOING REGULATORY ADVANCEMENTS."

SINGAPORE

Advanced air mobility (AAM) in Singapore is rapidly advancing, with significant milestones and collaborations setting the stage for a transformative future in urban air mobility (UAM). Jennifer Liu Panling, She, pderovides a comprehensive overview of the latest developments in Singapore.

Volocopter, a leader in the eVTOL space, has made remarkable strides, particularly with its VoloCity air taxi. As the first eVTOL startup to receive Design Organisation Approval (DOA) from the European Union Aviation Safety Agency (EASA), Volocopter is on track to secure final type certification before launching its services. In a significant demonstration of UAM's potential, Volocopter conducted a flight over Marina Bay in October 2019, providing a glimpse of what future air taxis might look like. The company has committed to launching air taxi services in Singapore within the next three years, reinforcing Singapore's position as a hub for innovative urban transportation.

Nanyang Technological University (NTU) is also playing a pivotal role in advancing eVTOL technology. In collaboration with Eaton Aerospace, NTU has embarked on a three-year research initiative to develop cutting-edge eVTOL solutions. This partnership integrates NTU's academic prowess with Eaton's industry expertise, pushing the boundaries of what is possible in urban air Supernal, mobility. Hyundai Motor Group's advanced air mobility division, has partnered with Singapore to lay the groundwork for new eVTOL air services. Announced during the Singapore Airshow in February 2024, this collaboration with the Civil Aviation Authority of Singapore (CAAS) aims to develop standards for AAM infrastructure, including charging solutions, airworthiness, and operational protocols. The government is also actively engaging with various stakeholders to integrate eVTOL technology into local urban transport infrastructure.



"SINGAPORE IS AT THE FOREFRONT OF THE EVTOL REVOLUTION, WITH KEY INDUSTRY PLAYERS AND ACADEMIC INSTITUTIONS DRIVING INNOVATION."

Singapore's air safety regulator is currently working on establishing infrastructure standards for AAM, including crucial aspects like electrical energy storage and charging solutions.

Public sentiment towards eVTOLs is generally positive, especially regarding job creation and the potential for enhanced connectivity. However, there is a need for greater public support and understanding of the benefits of this new mode of transport. Transparent communication and rigorous safety testing are essential to gaining public trust.

While the eVTOL industry in Singapore shows great promise, cross-border air taxi flights remain a challenge due to the lack of clear regulatory guidelines. Despite these obstacles, Singapore's strong governmental support and ongoing developments suggest that the eVTOL industry is poised for significant growth. The introduction of eVTOL services could revolutionize urban transport, offering a sustainable and efficient alternative to traditional transportation methods. As the regulatory environment evolves and public awareness grows, Singapore is well-positioned to become a global leader in urban air mobility.

LIAISON: MIHIR BAXI

As India strides forward into the realm of advanced air mobility (AAM), Mihir Baxi, Chief Product Officer at Alcifo, provides a detailed look into the dynamic developments shaping the sector. India, with its burgeoning population of 1.4 billion and a rapidly growing economy, stands at the precipice of transformative change in aviation technology. Mihir begins by highlighting the impressive progress made by Indian startups and international collaborations. Among the most promising developments is Sirloiation, a Bangalore-based startup making significant strides in vehicle development, and received a see funding from campus.

Marut Drones, another key player, has joined forces with Japan's Skydrive, marking a significant step toward manufacturing and deploying Electric Vertical Take-Off and Landing (eVTOLs) vehicles in India. Another notable mention is Vertifly Aerospace, recognized for its innovative contributions and awarded as a leading startup in India's AAM sector. Eplane, a pioneering Indian startup, is gearing up to develop a prototype of its four-seater aircraft by March 2025. These advancements underscore the growing enthusiasm and investment in India's air mobility landscape. International interest is also heating up. Archer, a prominent player in the eVTOL space, has signed a memorandum of understanding (MoU) with Indigo, India's largest airline.

"INDIA IS RAPIDLY EVOLVING INTO A KEY PLAYER IN THE GLOBAL AAM LANDSCAPE, DRIVEN BY INNOVATIVE STARTUPS, STRATEGIC INTERNATIONAL PARTNERSHIPS, AND PROACTIVE GOVERNMENT SUPPORT."

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This collaboration aims to launch eVTOL operations by 2026, capturing significant public and industry attention. Additionally, JetSetGo, a major nonscheduled operator in India, has committed to purchasing 200 eVTOLs from Eve Air Mobility, further underscoring the country's commitment to integrating electric and hybrid aircraft into its transportation ecosystem. In response to these advancements, the Indian government is mobilizing efforts to support and regulate the sector. The Directorate General of Civil Aviation (DGCA) is working closely with the European Union Aviation Safety Agency (EASA) to establish certification and standardization frameworks. DGCA's approval of Phase One for E-Plane's propeller certification is a notable step towards integrating new aircraft technologies into the Indian market.

The DGCA is also collaborating with industry groups to develop the necessary infrastructure for AAM, focusing initially on major cities like Delhi, Mumbai, and Bangalore. Meanwhile, the Bureau of Indian Standards is formulating standards for equipment and vehicles, ensuring alignment with global practices. Supporting these efforts, the World Economic Forum's Aviate program is providing valuable assistance to governments and companies in implementing advanced air mobility solutions. At Alcifo, Mihir and his team are working to assess demand and identify potential sites for vertiports. Utilizing advanced technologies like digital twins and AI, Alcifo aims to facilitate the integration of AAM solutions in urban environments. The future of advanced air mobility in India looks promising, with substantial developments on the horizon.

LIAISON: SACHA WETZEL

New Zealand, a country known for its breathtaking landscapes and pioneering spirit, is increasingly becoming a significant player in the field of Advanced Air Mobility (AAM). Sacha Wetzel, New Zealand's liaison for AAM and founder of the consultancy firm Ever Brims, offers an illuminating overview of the country's progress and future prospects in this rapidly evolving sector.

New Zealand, with a population of 5.3 million and a GDP of approximately \$400 billion, is harnessing its strong aviation heritage to drive advancements in AAM. The country's deep-rooted aviation culture, underscored by its significant helicopter-to-person ratio, supports a unique environment for developing and integrating new air mobility technologies.

"NEW ZEALAND'S NIMBLE SIZE AND INNOVATIVE SPIRIT AFFORD A UNIQUELY PERSPECTIVE IN THE GLOBAL AAM LANDSCAPE."

Recent milestones highlight New Zealand's commitment to innovation in AAM. Notably, OceanFly, a hybrid-electric aircraft project, has secured \$145 million in funding, largely from the UK. This significant investment aims to advance the development of eco-friendly air travel in New Zealand. Additionally, the country is home to groundbreaking projects such as Dawn Aerospace's space plane, showcasing its capability to support innovative aviation ventures beyond traditional boundaries. The regulatory landscape in New Zealand is also evolving to support AAM.



The Civil Aviation Authority is working towards establishing a comprehensive framework by 2025, which will be crucial for supporting manufacturers and various stakeholders in the AAM sector. This proactive approach reflects New Zealand's intent to foster a conducive environment for AAM growth and integration. Public sentiment in New Zealand is generally positive towards AAM, reflecting the country's strong aviation culture. Helicopters are a common sight and are used for various everyday purposes, from farming to personal transport. This familiarity with aviation creates a supportive backdrop for the introduction of AAM technologies. However, achieving broader public acceptance for AAM will require addressing challenges related to cost and accessibility.

Sacha Wetzel emphasizes that New Zealand's small size and innovative spirit position it uniquely in the global AAM landscape. Despite financial constraints, New Zealand's commitment to innovation and collaboration is pivotal for driving the future of air mobility.

In conclusion, New Zealand's advancements in AAM highlight its role as a forward-thinking player in the aviation sector. The country's robust aviation heritage, coupled with ongoing regulatory developments and public support, provides a solid foundation for further progress in AAM. Sacha Wetzel's insights underscore New Zealand's potential to make significant contributions to the global AAM landscape, driving both technological innovation and public acceptance.

LIAISON: CLEM NEWTON-BROWN

Australia has long been a country with a rich aviation heritage, and this legacy is now being extended into the realm of advanced air mobility (AAM). Clem Newton-Brown, a key figure in Australia's AAM sector, highlighted the nation's progress and challenges in a recent discussion, shedding light on the exciting developments and future prospects of AAM in Australia.

Australia, with a population of 26 million, is witnessing significant advancements in the AAM field. Companies like Airspeed are pioneering efforts in large crewed drones, designed for a Grand Prixstyle event. The nation is also home to innovative ventures like Dovetail, which focuses on electrifying legacy aircraft, and Revolution Aerospace, which is exploring drone deliveries to remote islands. Newton-Brown's own company, Skyportz, is contributing by developing a cost-effective vertiport solution, addressing challenges such as turbulence, fire suppression, and noise reduction.

On the regulatory front, Australia is well-positioned. The Civil Aviation Safety Authority (CASA), the country's air regulator, is progressive and closely aligned with global counterparts like the FAA and EASA. This alignment ensures that Australia is not isolated in its regulatory approach but is part of a global framework that supports AAM development. The release of vertiport guidelines and AAM strategic regulatory roadmap by the federal government further demonstrates the strong policy support in Australia. Moreover, state governments in Victoria, New South Wales, and Queensland have all introduced their own AAM action plans, further solidifying the country's commitment.



However, challenges remain. Public sentiment is mixed, particularly in response to drone delivery services like Wing, which has faced criticism despite its innovative approach. Additionally, local government resistance, exemplified bv the opposition to a central Melbourne helipad, poses a hurdle. Despite this, there are positive examples of community acceptance, such as the launch of Wing's service in Melbourne, which has been met with enthusiasm.

The real test, according to Newton-Brown, will be public acceptance of these technologies once they become more prevalent. Australia's wide open spaces and peaceful lifestyle could present a unique challenge in balancing technological advancement with community expectations. Yet, with programs like the Cooperative Research Centre (CRC) bringing together government, industry, and academia, Australia is well-equipped to address these challenges and continue its leadership in the AAM sector.

In conclusion, while Australia faces hurdles in its AAM journey, its strong policy support, innovative companies, and global collaboration efforts place it in a promising position. The country's ability to balance technological advancement with community acceptance will be key to its success in this rapidly evolving industry.

"AUSTRALIA IS MOST CONCERNED WITH REGIONAL AIR MOBILITY AND SERVICING OUTLYING AREAS THAT ARE NOT OTHERWISE CONNECTED."







FRANCE

LIAISON: FREDERIC MALLERET

"RECENT PROTESTS, INCLUDING ONE BY EXTINCTION REBELLION, HIGHLIGHTED CONCERNS OVER TRUE ENVIRONMENTAL IMPACTS AND THE PERCEIVED ELITISM OF FLYING AIR TAXIS."



Frederic Malleret, President of AeroWest Development, recently provided an insightful update on France's advancements in advanced air mobility (AAM). With a background in engineering and a focus on airborne equipment, Malleret is at the forefront of integrating France's rich aviation heritage with cutting-edge mobility solutions. France, a leader in civil aviation within Europe, continues to build on its storied history of innovation, exemplified by pioneers like Marcel Dassault and the legacy of Dassault Aviation. Today, France is home to prominent aerospace companies such as Airbus, Dassault, and Safran, which are pivotal in advancing AAM technologies.

Recent developments in France highlight significant progress in regional and urban air mobility. Notably, the Airbus A321XLR, showcased at the Farnborough Airshow, represents a major leap in commercial aviation by enabling longer-range, point-to-point flights. This advancement complements the regional air mobility initiatives, which include efforts to develop 19-seater, 30-seater, and certified 50-seater aircraft.

In the realm of advanced air mobility, France is witnessing a surge in innovation with various projects exploring different energy sources. Companies like Orio are leading the charge with electric and hybrid-electric aircraft, including the development of a 19-seater hybrid-electric model, the Era. Other notable projects include the Casio series from Voltaire, which aims to deliver scalable aircraft solutions, and Blue Spirit's two- and sixseater electric planes. Despite the promising advancements, public sentiment in France towards AAM has faced challenges. Critics argue that these technologies may not align with the broader ecological and social objectives of urban planning. However, supporters emphasize the potential benefits, such as improved emergency response capabilities and rapid delivery of goods.

In response to public and political challenges, efforts are underway to address these concerns. Paris, for instance, has proposed setting up floating vertiports to facilitate emergency services during the Olympic Games, demonstrating the practical benefits of AAM beyond passenger transport. The legal and regulatory landscape continues to evolve, with ongoing debates around certification and public acceptance.

Looking forward, France remains committed to advancing AAM through strategic partnerships and innovation. The country is preparing for major events like the Air Tech Conference and the Green Arrow Days, which will further showcase France's progress in the sector. With strong backing from industry leaders and a growing ecosystem of startups, France is well-positioned to lead the way in the global transition to advanced air mobility.

As the AAM landscape evolves, Frederic Malleret and his team continue to bridge gaps and foster connections within the industry, ensuring that France remains at the forefront of this transformative field.

GERMANY LIAISON: OLIVER REINHARDT

Germany, positioned at the heart of Europe, stands as a key player in the advanced air mobility (AAM) sector. Oliver Reinhardt, Chief Risk Certification Officer at Volocopter, provided an insightful overview of Germany's current position and future prospects in the field of AAM, including electric Vertical Take-Off and Landing (eVTOL) and uncrewed aerial systems (UAS).

With a population of 84 million, Germany is the most populous EU member state and boasts a robust economy, ranking as the third largest globally. However, its federal system, comprising 16 states with significant autonomy, adds complexity to the aviation sector. This decentralized structure often leads to varied regulatory approaches and implementation challenges, particularly in the context of advanced air mobility.

In recent developments, Germany has made notable strides in the eVTOL sector. The European Union Aviation Safety Agency (EASA) issued its first eVTOL flight permit, marking a milestone for the industry. Additionally, Germany is witnessing progress in flight testing phases, with Munich preparing for its compliance tests early next year. The German National Research Test Center in has become a pivotal infrastructure for urban air mobility, offering a dedicated airfield for comprehensive testing. Despite these advancements, Oliver highlighted the challenges Germany faces. The country's wellestablished public transportation network presents significant competition, making it difficult for new mobility solutions to demonstrate clear market viability. Furthermore, funding for late-stage deep tech startups is limited, impacting the growth potential of emerging companies in the AAM space. On the regulatory front, Germany is anticipating the release of a new AAM strategy by the Federal Government, expected in autumn this year.



This strategy aims to bolster the German industry and improve funding opportunities. However, there is a contrasting sentiment from a recent roundtable discussion led by the Ministry of Economic Affairs, which downplayed the immediate climate benefits of advanced air mobility. This stance has sparked debates within the industry, emphasizing the need for a more supportive regulatory environment. The federal system in Germany complicates uniform implementation of EU legislation, with regulations trickling down from the European level to state and regional authorities. This layered approach can delay and fragment regulatory changes, adding another layer of complexity to the sector.

Public sentiment in Germany remains cautious yet open. Historical patterns show that while Germans are typically reserved in adopting new technologies, they do so seriously once convinced. Recent public demonstrations of new technologies have been effective in shifting perceptions positively.

In summary, while Germany presents a strong economic base and advanced infrastructure for AAM, it faces significant challenges related to market viability, regulatory fragmentation, and public call acceptance. Oliver's for improved standardization and regulatory harmonization underscores the need for collaborative efforts to overcome these hurdles and advance the industry. For those looking to engage with Germany's AAM sector, staying informed and adaptable to the evolving landscape is crucial. The upcoming federal strategy and regulatory developments will be pivotal in shaping the future of advanced air mobility in Germany.

LIAISON: PHILIP BUTTERWORTH-HAYES

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The United Kingdom is making strides in advanced air mobility (AAM) under its new government, which has been in office for about a month. With a robust economy valued at approximately \in 3.5 trillion and a population of 67 million, the UK is positioning itself as a key player in the global AAM landscape. The country's rich aviation heritage and proactive stance on innovation are driving its ambitions in this sector.

A significant development is the establishment of the UK's first permanent vertiport at the Snowdonia Aerospace Centre in Wales. This facility marks a milestone for electric Vertical Take-Off and Landing (eVTOL) and drone testing, signifying the UK's commitment to advancing aerial transportation technologies. The vertical aerospace company has recently conducted a tethered flight of its XV-4 prototype, which is a major step towards full-scale flights.

The UK is home to several eVTOL manufacturers, including Vertical Aerospace, Skyfly Technologies, Faraday, and Sora. These companies are working on a range of projects, from battery-electric aircraft to regional electric solutions. For instance, Sora is developing a 30-passenger electric aircraft, and Light Aviation is working on a 40-seat model. These advancements underscore the UK's focus on both small and larger-scale aerial mobility solutions. On the drone front, the UK is advancing in Beyond Visual Line of Sight (BVLOS) operations, although significant regulatory hurdles remain.

The UK Civil Aviation Authority (CAA) is actively engaging with stakeholders to navigate the transition from experimental to commercial operations. The CAA's efforts are critical as the industry aims to move beyond the testing phase and into regular commercial use. The focus is increasingly on utilizing underused regional airports and small airfields rather than building urban air mobility hubs. This approach is expected to provide a greater overall impact due to lower infrastructure costs and wider catchment areas.

Looking ahead, the UK is setting ambitious targets. The Future Flight Action Plan aims to initiate piloted taxi flights by 2026 and establish regular services by 2028. These goals reflect the UK's bold vision for integrating autonomous flying taxis by 2030 and enhancing BVLOS operations. However, balancing these ambitious targets with practical implementation remains a key challenge.

As the UK continues to develop its AAM infrastructure and regulatory framework, it is clear that the country is positioning itself as a leader in this transformative sector. With ongoing innovations and strategic investments, the UK is set to play a pivotal role in shaping the future of advanced air mobility.

"STUDIES BY EA MAVEN CONSULTANCY, SUGGEST THAT THE AAM MARKET IN THE UNITED KINGDOM COULD REACH £5 BILLION BY 2035."

LIAISON: JULIE GARLAND

Ireland has long had a flourishing UAS industry and were the first European adopter of a drone register back in 2015, since then we have gone from strength to strength particularly with the adoption of the EASA EU Implementing Regulation 2019/947 and Delegated Regulation 2019/945 giving a solid regulatory framework for the development and growth of the industry.

Recently the Drone and Urban Air Mobility Strategy for Dublin City Council 2024-2029 was published and this document was co-authored by 2 AAM Institute country Liaisons: Julie Garland and Philip Butterworth-Hayes. <u>Available here at this link.</u>

"THE UAS INDUSTRY IS THE CORNERSTONE OF ADVANCED AIR MOBILITY IN IRELAND AND ALLOWS US TO BUILD THE SOLID FOUNDATIONS NECESSARY FOR REGULATOR AND SOCIETAL ACCEPTANCE."

Manna Drone Delivery hold a Light UAS Operator Certificate (LUC) and have achieved a SAIL III SORA with 1:4 remote pilot to UAS, BVLOS over populated environments and associated privileges in the Dublin suburb of Blanchardstown, close to Dublin Airport. Wing have commenced their delivery service in the South of Dublin on behalf of Apian, the medical logistics firm. Avtrain was privileged to work with the SkyLift team developing the SORA for the FlyingBasket FB3 heavy lift drone for Ørsted.

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This truly is a significant step forward for heavy lift, highly automated operations saving on costs, improving safety and having a significant impact on carbon footprint in the offshore wind energy environment. EASA has launched the 3rd release of the Innovative Air Mobility Hub which is an incredible resource for the community and <u>Available</u> <u>here at this link.</u>

The Joint European Drone Association (JEDA) President, Julie Garland signed and Memorandum of Cooperation with EASA Executive Director, Florian Guillermet for the voluntary reporting of incidents/occurrences to gather data from the industry grass roots so as to inform and guide the proportionality of future regulations. JARUS released SORA 2.5 and this will undergo a brief consultation before being adopted as an AMC to Article 11 Implementing Regulation 2019/947 later this year.

This is a significant body of work carried out by SRM WG and huge credit to all involved. Work on SORA 3.0 has now commenced with the next meeting of the JARUS SRM WG scheduled for Dublin in September 2024. The IAA have released a number of UAS Advisory Memorandums to clarify processes and procedures both under PDRAs and for SORA applications including guidance on MoCs. <u>Available here at this link.</u>

LIAISON: ARI ETELAVUORI

Finland is making significant strides in the field of Advanced Air Mobility (AAM), demonstrating a robust commitment to innovation and collaboration. Ari Etelavuori, representing Finland, outlines key developments and initiatives shaping the country's approach to uncrewed aviation and electric flight technologies.

One of Finland's pivotal contributions is its evolving educational landscape. A notable example is Haaga-Helia University's Applied Sciences course, which will soon transition to a fully virtual format starting this October. This course, previously dependent on in-person lectures, is being redesigned to offer a more structured and coherent online learning experience. The course will cover various themes relevant to AAM and invites international collaboration to enhance its content and reach a global audience. This move aligns with Finland's broader goal of integrating advanced technologies into educational frameworks and fostering global partnerships.

Finland is also advancing its infrastructure and technological capabilities through several ambitious projects. The Smart Urban E-Fly initiative, funded partly by the European Union, aims to develop viable business models for electric aviation. This project is part of a larger effort to assess the commercial feasibility of electric flying technologies, which is crucial for the broader adoption of AAM solutions. Finland is preparing for international collaboration to further this initiative, welcoming global stakeholders to contribute and benefit from this endeavor. The country's commitment to innovation is also evident in its industry collaborations. INTOSeinäjoki in Finland is developing a competence ecosystem that integrates academia and industry to address AAM challenges.



Similarly, the Digital Airport project, in Helsinki East Aerodrome is focused on creating advanced aerodrome facilities that support AAM operations.

Public sentiment towards drones and AAM technologies in Finland is generally positive. Recent survey, included in the Airmour project, reveal that a majority of respondents are supportive of drone technology, with a significant portion recognizing its potential for emergency use. However, there are concerns about safety, security, and privacy, which remain central to public discussions.

The Technical Research Center of Finland (VTT) is actively involved in addressing these concerns through various projects, including the development of air mobility operator models. These projects aim to scale up operations and ensure that AAM technologies meet safety and operational standards. Through educational advancements, innovative projects, and a collaborative spirit, Finland is positioning itself at the forefront of the AAM industry. The country is not only addressing current challenges but also laying the groundwork for future advancements in this rapidly evolving field.

> "FINLAND'S PROACTIVE APPROACH TO AAM HIGHLIGHTS ITS ROLE AS A LEADER IN THE INTEGRATION OF UNMANNED AND ELECTRIC AVIATION TECHNOLOGIES."

ROMANIA

LIAISON: KATRIN MAYRHOFER

"SEARCH AND RESCUE DRONES SUCCESSFULLY LOCATED A MISSING CHILD IN THE CARPATHIAN MOUNTAINS OF ROMANIA."

Romania, with its vibrant capital Bucharest, is making strides in the advanced air mobility (AAM) sector, driven by a rapidly growing economy and a burgeoning interest in aviation technologies. As Captain Katrin Mayrhofer, COO and co-founder of Elsa Industry and Polycom, outlines, the nation's advancements are significant but face notable challenges.

Romania's population of nearly 20 million is witnessing an economic boom, reflected in a rising GDP and the creation of approximately 100,000 jobs related to air transport and tourism. This growth underscores the aviation sector's importance to the country's economy. Recent milestones, including Romania's entry into the Schengen Area in April, highlight its increasing integration into the European framework. The nation is also undergoing a transformation in urban mobility and logistics, underpinned by legislative updates like the National Advanced Air Mobility Act. This framework aims to streamline approval processes and foster innovation in AAM. Despite these efforts, public sentiment remains mixed, with concerns about privacy and safety casting shadows over the potential benefits of AAM technologies.

Success stories from Romania's AAM sector demonstrate its potential. For instance, drones delivered essential medical supplies during severe weather in January. These incidents highlight the practical benefits of AAM technologies in critical situations. However, Romania faces challenges in balancing innovation with public acceptance. Environmental and privacy concerns have led to protests and vandalism of drone infrastructure. The mixed public sentiment is reflected in recent polls, with a generally positive but cautious attitude toward AAM. Urban residents tend to be more supportive due to their exposure to technology, whereas rural and older populations call for stringent regulations and clear guidelines. Efforts to address these challenges include pushing for three major projects: integrating electric vertical takeoff and landing (eVTOL) aircraft into Bucharest's transportation network, developing nationwide UAS infrastructure, and utilizing uncrewed aerial systems (UAS) for environmental monitoring and disaster management. Despite these ambitious goals, progress is hampered by a lack of clear regulations and public skepticism.

Romania's strategic position, bordering Ukraine and the Black Sea, adds urgency to its AAM initiatives. While the government and various stakeholders are making concerted efforts, more robust action is needed to address regulatory gaps and improve public acceptance.

Overall, Romania is positioning itself as a key player in the AAM sector, with potential benefits including job creation, economic growth, and enhanced public services. The journey ahead involves navigating the complexities of regulatory frameworks and public perception to ensure the successful integration of advanced air mobility technologies. For further collaboration on regulatory topics within Europe, Katrin Mayrhofer invites interested parties to join working emphasizing ongoing groups, the importance of collective efforts in advancing Romania's AAM sector.





LIAISON: BEAU METZ

The Netherlands, a small yet influential player in the global aviation sector, is making significant strides in advanced air mobility (AAM) and aerospace innovation. Despite its modest size, the country is a hotbed of activity. Historically, the Netherlands has been a key player in aviation, with renowned names like Fokker and KLM leading the way.

Today, the legacy continues with cutting-edge research and development spearheaded by institutions such as the National Aerospace Laboratory (NLR) and TNO. These organizations, along with industry groups like Dutch Drone Delta, are pushing the boundaries of what's possible in drone and AAM technology. The Netherlands' aviation sector is centered around five key regions, each contributing uniquely to the industry. The Amsterdam metropolitan area, home to Schiphol Airport, is a focal point for aerospace companies, including giants like Boeing and Airbus. This region offers abundant opportunities for aviation-related activities and innovations.

In contrast, the eastern Netherlands, with its strong focus on advanced materials, is critical for the development of composites and semiconductors essential for aerospace applications. The Twente region, featuring a 3-kilometer runway at its airport, is an ideal location for trial flights and pre-flight testing. The southern Netherlands, especially around Eindhoven, is a hub for high-tech companies and research institutions like ASML and Philips.

This area is crucial for the development of advanced technology and infrastructure supporting AAM. Eindhoven Airport and the Brainport region are key to the innovation ecosystem here. Meanwhile, the northern region, with its focus on maintenance, is home to Europe's major Maintenance, Repair, and Overhaul (MRO) facilities.



Recent developments in the Netherlands highlight a strong commitment to advancing AAM. Initiatives like the Hubs project, involving major players such as Shell and KLM, are working on integrating hydrogen into aviation, reflecting a growing emphasis on sustainability. Additionally, the Amsterdam Drone Week and the establishment of specialized drone teams by the Amsterdam police underscore the Netherlands' proactive approach.

"CALLS TO CLOSE ROTTERDAM AIRPORT ILLUSTRATE THE TENSION BETWEEN DEVELOPMENT AND ENVIRONMENTAL CONSIDERATIONS IN THE NETHERLANDS."

Despite these advancements, the Netherlands faces challenges. Public resistance to aviation due to environmental concerns and local government pressures on airport operations are significant hurdles. Yet, the country remains a fertile ground for innovation. Projects such as the Medical Drone Service, which transports medical supplies, and new ventures like the PAL-V, a vehicle focusing on flydrive mobility, highlight the Netherlands' role in pioneering new AAM solutions. The country's openness to sustainability and rapid adaptation make it an ideal environment for testing and developing new technologies. Looking ahead, the Netherlands is set to host major events, including World Aviation Festival.

LIAISON: AURELIE JOY PASCUAL-WERNER

for Switzerland, renowned its picturesque landscapes and robust economy, is also making significant strides in the drone industry. Aurélie Joy Pascual-Werner, President of the Drone Industry Association Switzerland, recently provided an insightful overview of the sector's current landscape, highlighting key developments and the nation's unique approach. Switzerland, with a population of 8.9 million and a GDP of \$818.4 billion, is characterized by a high per capita income of \$92,000. The Federal Office of Civil Aviation (FOCA) oversees aviation regulations with a pragmatic approach, essential for fostering innovation in emerging technologies like drones.

A notable development in Switzerland is the collaboration between RigiTech and Involi. RigiTech, a leading drone developer based in Lausanne, and Involi, known for its air traffic information services, have teamed up to enhance integration in aviation. This partnership aims to streamline the integration of new aviation technologies into existing systems, facilitating safer and more efficient operations. Another significant player in the Swiss drone landscape is the Touring Club Swiss (TCS). Originally an automobile club, TCS has expanded its focus to include drones and vertical mobility. By establishing an academy, TCS is training professionals in emergency rescue and mobility services, thereby preparing a skilled workforce for the burgeoning drone industry.

"SWITZERLAND'S AAM INDUSTRY IS PROGRESSING RAPIDLY, SUPPORTED BY A STRONG UAS REGULATORY FRAMEWORK, COLLABORATIVE PARTNERSHIPS, AND GOVERNMENT INITIATIVES." The Swiss government is also actively supporting the sector. The Federal Office for Defense recently organized a roundtable to address drone-related challenges and foster collaboration between industry representatives and government entities. This initiative includes the creation of the Swiss Drone and Robotic Center, aimed at consolidating knowledge, developing testing facilities, and supporting local industry growth.

Public sentiment in Switzerland towards drones is generally positive, with a keen interest in innovation and technology. However, there is also a growing concern about the environmental impact of aviation. While many view drones as a cleaner alternative to traditional methods, there are ongoing debates about their overall environmental footprint. The Drone Industry Association is working to address these concerns by promoting the benefits of drones in various civil applications, such as search and rescue and data collection, rather than focusing solely on military uses.

The association has recently published the "Swiss Drone Industry Report," providing an independent analysis of the sector's trends, challenges, and impacts. This report is intended to assist companies in securing investment and fostering industry growth. While public perceptions vary, ongoing efforts aim to address environmental concerns and highlight the positive contributions of drones to various sectors. The country's proactive approach sets a promising example for integrating new technologies in a sustainable and efficient manner.





LIAISON: CHRISTOS XYLOKOTAS

Greece is rapidly advancing in the fields of advanced air mobility (AAM) and uncrewed aerial systems (UAS), marking significant progress over the past six months. Christos Xylokotas, a pilot and helicopter instructor, provided an insightful update. Greece, a parliamentary republic and European Union member, boasts a population of around 10.3 million and a GDP of approximately €230 billion. The country's regulatory framework for AAM includes oversight from the Hellenic Civil Aviation Authority and the European Union Aviation Safety Agency ensuring alignment with European (EASA), standards and regulations.

One of the notable achievements in recent months is the initiative by Aria Hotels, part of the Libra Group, which is investing nearly €50 million to develop four vertical charging stations and lease 10 electric Vertical Take-Off and Landing (eVTOL) aircraft from Beta Technologies. These vertiports, strategically located in Athens, the southern mainland, and the Aegean Islands, aim to revolutionize regional connectivity. The project, expected to launch within two years, is anticipated to boost job creation and economic growth in aviation and tourism sectors.

Another significant milestone is the establishment of DRONOMICS, a cargo drone airline that has partnered with ELTA Postal Service to launch postal drone deliveries in Greece. The initial operations will commence from Kavala Airport in Northern Greece, with plans to expand to additional airports. Supported by a €10 million funding agreement from the European Innovation Council, this initiative promises enhanced delivery efficiency, economic stimulation, and reduced carbon emissions. Moreover, the successful collaboration between UCANDRONE and Nova has implemented a drone delivery service for medical supplies in the Naxos Island and small Cyclades.



"THE GREEK MINISTER OF HEALTH APPROVED FURTHER EXPANSION OF AAM TO IMPROVE HEALTHCARE ACCESS IN REMOTE AREAS."

In the realm of civil protection, drones are being utilized for wildfire detection and firefighting coordination. Equipped with AI for fire and smoke detection, these drones assist first responders in managing field operations and monitoring critical infrastructure. The integration of drones in firefighting has been praised by government officials and the media, despite a recent incident where a test flight inadvertently caused a wildfire, raising safety concerns. Despite these advancements, the sector faces challenges, particularly regarding safety and regulatory hurdles. Addressing these issues is crucial for maintaining public trust and advancing the adoption of AAM and UAS technologies. However, the overall sentiment in Greece remains positive, with recognition of the potential for transforming tourism and regional connectivity through innovative solutions.

Looking ahead, future projects like Orama Nexus, which plans to introduce electric air taxis by 2025-2026, exemplify the exciting advancements on the horizon. Christos Xylokotas is closely monitoring these developments, which are expected to be significant investments in Greece's AAM landscape.

In conclusion, Greece is making impressive strides in advanced air mobility and uncrewed aerial systems, with promising initiatives and projects paving the way for transformative changes in transportation and logistics.

LIAISON: LUIS LIRA



Luis Lira, founder and CEO of Negotiator Special, has provided a detailed account of Spain's advancements in the field of Advanced Air Mobility (AAM). His consultancy firm specializes in aerospace communication, brand management, and aeronautical project management, making him a key figure in Spain's AAM sector.

Spain, with a population of approximately 48 million, is the fourth-largest economy in the European Union, boasting a Gross Domestic Product (GDP) of around \$1.4 trillion USD. The country's regulatory landscape for AAM is overseen by several key authorities, including the European Union Aviation Safety Agency (EASA), which ensures safety and security in aviation operations. Additionally, Spain's National Air Traffic Control (ENAIRE) plays a crucial role in managing air traffic and integrating new aviation technologies.

Luis Lira's presentation highlights Spain's strategic approach to fostering AAM development through a multi-pillar framework. The first pillar focuses on public sector engagement, emphasizing the importance of government support in shaping and implementing AAM regulations. This includes collaboration with local authorities to streamline the approval processes for new technologies and infrastructure. The second pillar, clusters and alliances, underscores Spain's efforts to build robust networks of stakeholders in the AAM ecosystem. By fostering partnerships between industry players, research institutions, and government bodies, Spain aims to create a collaborative environment that accelerates the development and deployment of AAM technologies. The third pillar involves infrastructure operators, which is critical for the successful implementation of AAM. These facilities provide a controlled environment for testing advanced air mobility solutions, ensuring they meet safety and performance standards before widespread deployment.

Finally, the fourth pillar encompasses events and media outreach. Spain is actively involved in organizing and participating in industry events to showcase its advancements and attract international attention. These events serve as platforms for sharing knowledge, discussing regulatory developments, and promoting Spain as a leading hub for AAM innovation.

Luis Lira's insights reflect Spain's proactive stance in advancing AAM. With a supportive regulatory framework, collaborative industry efforts, and investment in infrastructure, Spain is positioning itself as a key player in the global AAM landscape. The country's commitment to developing a comprehensive AAM ecosystem highlights its ambition to lead in the future of aviation.

"SPAIN IS INVESTING IN AAM TEST CENTERS AND REGULATORY SANDBOXES TO FACILITATE EXPERIMENTATION AND REFINEMENT OF NEW MOBILITY TECHNOLOGIES."

LIAISON: ISABELLE NYROTH

Sweden, renowned for its commitment to innovation and sustainability, is making significant strides in the field of Advanced Air Mobility (AAM). Isabelle Nyroth, Founder of the consultancy firm Yvarbrims, offers an insightful overview of the country's current advancements and future potential in this dynamic sector. With its capital in Stockholm, Sweden is globally recognized for its progressive approach to technology and sustainability. Known for companies like IKEA and Spotify, Sweden is now emerging as a key player in AAM. The country's population of 10.4 million benefits from a high standard of living, supported by a robust GDP of approximately \$580 billion. This economic stability creates a fertile environment for pioneering advancements.

"RISE, A PROMINENT RESEARCH INSTITUTE IN SWEDEN, IS DEEPLY INVOLVED IN UTM, SAFETY, AND PUBLIC ACCEPTANCE."

Recent industry milestones highlight Sweden's commitment to integrating AAM technologies. Swedish company Heart Aerospace is at the forefront of hybrid-electric air travel, collaborating with Region Gotland to facilitate eco-friendly flights for up to 30 passengers between mainland Sweden and Gotland. This initiative represents a significant step towards sustainable regional air travel. Moreover, Swedish entities are working with companies like SAAB and LFV to advance digital air traffic solutions, aiming for fully autonomous air traffic management. Despite these advancements, the sector faces challenges. The recent bankruptcy of the aerial delivery company Aerit, due to financial difficulties, underscores the hurdles in securing funding and sustaining innovative ventures.



However, Aerit's efforts in gaining public acceptance for aerial deliveries were notable and provide valuable lessons for the industry. On the regulatory front, Sweden is making incremental progress. The introduction of the UAS airspace map, including NOTAMs (Notices to Airmen), improves operational transparency and efficiency. Nevertheless, a recent legal case highlighted ongoing challenges in UAS regulations, indicating a need for continued refinement and public education.

Public sentiment towards AAM in Sweden is generally positive, though it is marked by both enthusiasm and cautious skepticism. Media coverage often highlights beneficial applications of drones, such as wildlife monitoring and search and rescue operations, which helps boost public acceptance. However, comprehensive data on overall population sentiment is still needed. Higher education programs are training operators for complex drone operations, reflecting a strong interest in the field. Collaborative efforts are preparing cities for urban air mobility, with projects set to launch soon. Additionally, the APIS project by the Royal Institute of Technology in Stockholm is investigating the acoustic impacts of future aviation technologies, crucial for ensuring public acceptance of urban air mobility.

In conclusion, Sweden's advancements in AAM, though accompanied by challenges, signal a promising future. The country's robust innovation ecosystem, ongoing projects, and regulatory improvements position it as a significant contributor to the global AAM landscape. Isabelle Nyroth's insights reflect Sweden's resilience and creativity as it navigates and shapes the future of air mobility.

AUSTRIA

LIAISON: REMUS MATEI

Remus Matei is a Romanian architect based in Austria. A small yet innovative country in Europe with a population of 9 million, Austria is making notable advances in aviation technology, particularly AAM. Austria's technological landscape is marked by significant milestones. Among the key projects is Cyclotech's groundbreaking 360-degree propulsion system. This technology, coupled with the Climatic Wind Tunnel in Vienna, represents a globally unique test facility certified for aviation, underscoring Austria's commitment to pioneering advancements in propulsion technology.

Moreover, Austria is actively involved in EU projects like Reciprocity and surface technology innovations for electric air taxis spearheaded by the Austrian Institute of Technology. These initiatives reflect Austria's proactive stance in developing and integrating cutting-edge air mobility solutions. Key partnerships are central to Austria's progress. The Selene Sky Alliance, for instance, is focused on automated air mobility, while collaborations with companies like Sales and FlyNow Aviation highlight the country's dynamic approach to integrating new technologies into the aviation sector.

On the regulatory front, recent updates to Austria's flying laws have set the stage for advanced air mobility. While these regulations may not yet fully address all aspects of this emerging sector, the Austrian government's FTI Strategy 2030 aims to bolster research, technology, and innovation, providing a supportive framework for future developments. While there are concerns about noise pollution, safety, environmental impact, and privacy, there is also growing awareness and interest in how this technology can enhance connectivity and create job opportunities.



Successful projects like Cyclotech's €20 million funding for a revolutionary aviation propulsion system and public events such as the Drone Festival in Andras reflect a positive trajectory in public engagement and media coverage. Remus Matei is also involved in designing a vertiport landing hub for isolated mountain regions. This architectural project aims to address the unique challenges of building infrastructure in remote areas, enhance connectivity, and promote sustainable tourism.

Challenges remain, including infrastructure limitations, extreme weather conditions, high costs, and policy regulations. However, upcoming events like the Aviation Forum Austria in October 2024 and the Drone Festival in Andras will further highlight Austria's commitment to advancing this field. Ongoing efforts and innovations position it as a key player in the global landscape of advanced air mobility, offering exciting prospects for technology enthusiasts and investors alike.

> "AUSTRIA'S FOCUS ON TRANSPORT DRONES FOR SPECIAL CONSTRUCTION SITES AND RESCUE OPERATIONS, ALONGSIDE ITS PASSION FOR EXTREME SPORTS, PRESENTS NUMEROUS OPPORTUNITIES FOR AAM."

ITALY

LIAISON: SALVO FORZESE

As Italy continues to make strides in the field of Advanced Air Mobility (AAM), 2024 is proving to be a landmark year. The nation's progress in integrating cutting-edge aviation technologies and regulatory advancements underscores its commitment to shaping transportation.

One of the most significant developments is the memorandum of understanding signed between Lilium, C. Milan airports, and Skyports. This collaboration aims to establish a network of vertiports across Lombardy by 2027, a crucial step towards creating a robust infrastructure for advanced air mobility. The initiative promises to enhance urban transportation by offering fast, efficient, and sustainable alternatives. In a substantial move that highlights its investment in the future of air mobility, Stellantis has committed \$55 million to Archer Aviation. This investment will facilitate the production of 650 aircraft annually, accelerating the transition to sustainable air transportation and reflecting Italy's active role in supporting innovative aviation solutions. The certification of Flying Basket's Light UAS marks a notable achievement in drone technology. This recognition attests to the reliability and safety of their operations, opening up new avenues for commercial and industrial drone applications across Italy. Additionally, the St. 100 solar drone's recent accomplishment of a new low-altitude flight record with 93 consecutive hours in the air underscores Italy's leadership in experimenting with renewable energy solutions for air mobility. Italy's startup scene is also making waves. AB Zero, in partnership with Euro Usc. Italia, has received authorization from ANAC to operate a drone transport route in the Iolian Islands Archipelago. This pilot project significantly reduces delivery times for urgent medical goods, highlighting the potential of drones to enhance healthcare delivery in remote areas.



Moreover, Italy's commitment to sustainability was demonstrated by H2C's green hydrogen-powered drone, which conducted an experimental flight for medicine transport in Venice on May 20, 2024. This initiative showcased technological efficiency and zero CO2 emissions, reinforcing Italy's dedication to eco-friendly transportation solutions. The Italian AAM sector is addressing challenges related to regulation, safety, and infrastructure integration with notable progress. ENAC's new regulation for vertical takeoff and landing aircraft establishes clear guidelines for VTCs, navigation, reserved flight corridors, and vertiports. The issuance of the Light UAS certificate to Flying Basket further enhances the regulatory landscape, ensuring a safe and organized approach to drone operations.

Social attitudes toward AAM in Italy remain positive, with no significant protests or vandalism reported. Ongoing efforts by the Advanced Air Mobility Institute and collaborations with local entities, such as ANCI Toscana, continue to foster support and interest in AAM initiatives. Looking ahead, Italy will host several key events in 2024, including the 5th National Conference on Air Mobility in Turin, the Drone Italy Expo in Bologna, and the Rome Drone Conference. These gatherings will be crucial for advancing discussions and collaborations in the field. Italy's advancements in AAM reflect a dynamic forward-thinking approach, driven and bv substantial investments, innovative projects, and supportive regulations. As the country continues to lead in this sector, its collaborations with industry and academia will be vital in overcoming future challenges and roadblocks.

BULGARIA

LIAISON: IVO BARZOV

"BULGARIA HAS THE POTENTIAL TO PLAY A SIGNIFICANT ROLE IN THE EUROPEAN DRONE INDUSTRY, PARTICULARLY BY ESTABLISHING U-SPACE TEST ZONES AND ATTRACTING INTERNATIONAL INVESTMENT."



Although Bulgaria may not be a frontrunner in the global aviation industry, it has a long-standing history in aviation, dating back to the early 20th century. Over the years, the country has built a solid foundation in aviation through its expertise, involvement of governmental and military authorities, educational institutions, and aviation infrastructure. With the worldwide growth of drone technologies, new opportunities have arisen for Bulgarian tech companies to carve out a niche in this rapidly evolving sector.

Bulgaria is actively participating in the development of UAS (Uncrewed Aerial Systems) regulations on a European level, working closely with the European Union Aviation Safety Agency (EASA) and the Joint Authorities for Rulemaking on Uncrewed Systems (JARUS). The implementation of these regulations in Bulgaria is overseen by a department within the Civil Aviation Administration (CAA), ensuring that the country aligns with the broader European framework for drone operations.

The UAS cluster in Bulgaria is still in its early stages but shows significant promise. It is composed of three sub-clusters: Hardware, Services, and Software. While the Services sub-cluster has the most companies, similar to other parts of Europe, the Hardware and Software sectors hold the greatest potential for value-added contributions. Bulgaria is home to a few prominent players on the European stage, such as Dronamics, known for its innovative cargo drone solutions. However, the country currently lacks equipment manufacturing and U-Space infrastructure, which is essential for enabling fully autonomous drone operations alongside other aircraft by 2030.

Several factors contribute to Bulgaria's potential competitiveness in the UAS industry. The country offers opportunities for attracting venture capital funding for UAS projects and start-ups, has a welldeveloped ICT cluster, and benefits from a highly skilled engineering workforce. Additionally, Bulgaria's flat corporate and personal income tax rate of 10% makes it an attractive destination for businesses.

One of the standout success stories in Bulgaria's UAS industry is Dronamics, the first licensed cargo drone airline in the European Union. Founded in 2014 by brothers Svilen and Konstantin Rangelov, Dronamics is known for its Black Swan cargo drone, which can carry a 350 kg payload over a range of more than 2,500 km. This achievement highlights Bulgaria's potential to become a regional leader in the UAS industry.

BELGIUM

LIAISON: GLORIA NDONGO

Belgium plays an important role in the space and aeronautics sector. From the time of the aviation pioneers, Belgium has been at the forefront of aeronautical research and construction. And this is still the case today. Today, whether in Wallonia or Brussels, the aeronautics industry. As proof of this, many aircraft bear the stamp of Belgian know-how: Airbus, Boeing, F-16, Rafale, Falcon 7X. With the progress of uncrewed aviation technology, Belgium is not standing still, and is involved in many R&D projects.

Regulations are currently being created on the European level where each Member State works together with the EASA (European Union Aviation Safety Agency) and JARUS (Joint Authorities for Rulemaking on Uncrewed Systems). The body which implements UAS regulations in Belgium is a department within the Belgium Civil Aviation Administration ("BCAA"). The European legislation is completed by Royal and Ministerial Decrees.

The UAS cluster in Belgium is still in its early stages and comprises three sub-groups: Hardware, Services and Software. As in the rest of Europe, the services sub-group predominates. However, the hardware and software sectors offer the greatest added value. A number of drone manufacturers are also beginning to make their mark, including SABCA, Dronematrix and SKY-HERO.

"BELGIUM FIGHTS TO BE A PIONEER IN THE AAM SECTOR BUT THE DOMESTIC DEMAND FOR DRONE SERVICES AND TECHNOLOGY IS FAIRLY LIMITED."



The Port of Antwerp plays a key role as a U-SPACE test zone. A royal decree to implement the European U-Space is under construction. Skeyes, formerly called Belgocontrol, the Belgian air navigation and traffic service for the civil airspace, is appointed to be the UTM/U-Space provider in Belgium.

This will enable drones to fly fully autonomously and simultaneously with other aircraft in designated airspace. To be competitive in Belgian companies have to fight for attracting funding for UAS projects and start-ups as venture capital companies, available engineering workforce in the country, the ability to receive an operational authorization for specific category flights. Despite the increasing popularity of drones and their applicability in various fields of business and warfare, the main demand source on the local market comes from people using drones for recreational purposes as well as some professionals in the field of advertising, video filming and photogrammetry.

The first autonomous BVLOS flights at the Port of Antwerp took place in June 2024. They were operated by the start-up ADLC over a 10 km range. These were the first cargo flights carrying petrochemical samples between a boat and the laboratory. ADLC was granted of a SORA authorization. This great adventure began as an academic project, before being extended into a business project called Samplifly. The aircraft has a 52kg MTOW with a maximum payload of 15kg. The PW-Orca was designed for BVLOS transport flights in a sparsely populated environment.

PORTUGAL LIAISON: JOSÉ RENATO MACHADO



Portugal is rapidly emerging as a critical hub for advanced air mobility (AAM) solutions, thanks to the proactive engagement of authorities, a dynamic startup ecosystem, and diverse geographical features ideal for testing innovative technologies. There are significant advancements and initiatives within Portugal's AAM landscape, which reinforces the country's strategic role in the global evolution of aviation.

The company plans to initiate operations in two non-EU countries by 2025, further extending its international reach and solidifying its role in the global AAM industry.

"ONE OF THE MOST SIGNIFICANT ADVANCED AIR MOBILITY DEVELOPMENTS COMES FROM ELIOT, WHICH HAS SUCCESSFULLY TESTED ITS HEAVY LIFT MULTI-ROTOR DRONES AND THE FLIGHT TERMINATION SYSTEM (FTS) KNOWN AS SAIL II, VALIDATED BY THIRD-PARTY ASSESSMENTS. ELIOT HAS ALSO ENTERED INTO A COOPERATION AGREEMENT FOR CONDUCTING FURTHER TESTS IN PORTUGAL'S ISLANDS."

One of the key players is Connect Robotics, which recently secured a permit to conduct flights in Lisbon. The company is utilizing multi-rotor drones weighing less than 25 kg to transport payloads across specific routes in designated areas. This initiative marks an important step in integrating drone technology into urban logistics, setting a precedent for other regions to follow. Similarly, Speedbird Aero has chosen Portugal as the gateway to the European market. This strategic decision underscores Portugal's growing importance in the AAM sector. On the regulatory front, the National Civil Aviation Authority (ANAC) in Portugal is playing a pivotal role in facilitating the development of AAM. ANAC has been actively involved in public presentations about the U-SPACE framework and has hosted webinars focused on the Specific Category rules and SORA 2.5 guidelines. Their ongoing support to operators is crucial in ensuring the safe and efficient integration of AAM technologies into the national airspace.

Looking ahead, the momentum in Portugal's AAM sector is set to continue with several key events on the horizon, including the Portugal Air Summit in October and the AAM Summit in November.

POLAND

LIAISON: MALGORZATA WOJTAS

Poland, with its capital in Warsaw, is making strides in the uncrewed aerial vehicle (UAV) sector. With a population of around 37.6 million, Poland's burgeoning drone industry reflects both significant advancements and ongoing challenges. In recent years, Poland has seen notable developments in drone technology. A key project highlighted by Malgorzata Wojtas involves a collaboration between her company and Farada to develop a de-icing system for the Farada Beetle, a small UAV. This project, executed as a sprint, successfully demonstrated the capabilities of the new system, which is set to be tested under real conditions in winter.

The Polish drone sector is also undergoing regulatory updates. The European Union's evolving laws have prompted changes in drone classification, registration, and certification. Notably, the Polish Civil Aviation Authority and other national bodies have launched digital services to streamline drone These services include online operations. qualification management, registration. and advanced planning tools, enhancing administrative efficiency and operational convenience.

Poland's regulatory framework has adapted to the EU's requirements, focusing on ensuring safety and compliance. This includes recent updates to insurance requirements for drones over 120 grams. Despite the regulatory advancements, the industry has faced challenges, including a rise in drone incidents. This increase can be attributed to both a growing number of drone operators and improved documentation of incidents. Most incidents involve illegal activities or breaches of airspace regulations. Public sentiment in Poland towards drones is generally positive, with acceptance around 60-70%, depending on the sector.



"THE POLISH GOVERNMENT IS INVESTING IN UNCREWED AERIAL SYSTEMS FOR DEFENSE PURPOSES, PARTICULARLY IN RESPONSE TO REGIONAL SECURITY CONCERNS."

While there are concerns about privacy, safety, and noise pollution, the benefits of drone technology such as innovation, job creation, and enhanced public safety—are widely recognized. For instance, drones played a crucial role in a 2021 rescue operation in Polish mountains, highlighting their value in emergency situations.

Looking ahead, Poland is focusing on several key areas. There are also ongoing projects involving UAVs with hydrogen propulsion systems, reflecting a push towards sustainable technology. Malgorzata Wojtas is actively involved in these developments, working on projects in collaboration with the Ministry of National Defense and exploring opportunities for international partnerships. The goal is to continue advancing drone technology while addressing regulatory and public concerns.

In conclusion, Poland's drone industry is poised for growth, driven by technological innovation and supportive regulatory frameworks. However, it must navigate challenges related to safety, privacy, and rapid regulatory changes. The future holds promising prospects for collaboration and further advancements in this dynamic field.

SPECIAL PRESENTATIONS

SPONSORS

Honeywell | Sapan Shah | Director of Product Management

Daedalean AI | John Mora | Director of Communications

KEYNOTES

Dunia Abboud | AAM Community & Project Manager | ICAO

Verity Richardson | Director of Business Development | Archer Aviation

Olga Fleming | Chairwoman | World Sustainable Development Fund

Jeremy (Jam) Hartley | Aviation Ecosystem and AAM Expert

GUESTS

Fahad Masood | Research Council | AAM Institute

Don Berchoff | Senior Advisor | AAM Institute

Selika Talbott | VP of Strategic Policy | AAM Institute

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SPONSORED SPEAKER

Sapan Shah

Director of Product Management

Sapan Shah, Senior Director of Product Management at Honeywell's Advanced Air Mobility (AAM) team, recently shared the company's strategic outlook and contributions to the burgeoning field of AAM. With over five years of dedicated involvement in this sector, Shah provided a comprehensive overview of Honeywell's efforts to drive innovation and support the industry's growth. Honeywell's commitment to AAM is rooted in a vision where same-day delivery becomes a reality in all populated part of the world. Shah highlighted Honeywell's dual focus on transforming air taxi services and addressing defense sector needs. For air taxis, Honeywell envisions enabling 160-kilometer commutes within 45 minutes, which would revolutionize urban and regional travel. Meanwhile, in the defense sector, the company anticipates a convergence of civilian and military applications, driven by ongoing global conflicts and technological advancements.

Over the years, Honeywell has made significant strides by engaging with leading original equipment manufacturers (OEMs) and contributing to various groundbreaking projects. The company has collaborated with notable firms such as Vertical Aerospace, Lilium Jet, and Pipistrel, providing critical avionics, flight controls, and other solutions. Honeywell is also working with Archer to support their entry into service and recently announced a new program with Electra for their short takeoff and landing aircraft. Beyond product development, Honeywell plays an active role in supporting the AAM ecosystem. The company invests in startups through its ventures team, reflecting its belief in the sector's potential. This financial backing signals Honeywell's confidence in the market and its commitment to fostering innovation.



Additionally, Honeywell organizes an annual Advanced Air Mobility Summit in Washington, DC, which brings together regulators, legislators, and industry leaders. This summit serves as a platform for discussing regulatory needs, industry challenges, and collaborative solutions. Prominent figures such as Senator Tammy Duckworth and Congressman Sam Graves have participated in these events, underscoring the summit's importance in shaping AAM policies. Shah also highlighted Honeywell's contributions to regulatory frameworks. In 2023, the company released a certification guide to aid navigating the complex regulatory startups landscape. This year, Honeywell plans to introduce a "Regulatory Readiness Level" framework, designed to objectively measure and compare the progress of various industry players. This tool will help assess advancements from both established aerospace companies and newer entrants, offering a transparent view of industry development.

In summary, Honeywell's efforts in AAM are characterized by a commitment to innovation, strategic partnerships, and active engagement in shaping regulatory frameworks. Sapan Shah's presentation illuminated how Honeywell is not only advancing technological solutions but also playing a crucial role in supporting the overall maturation of the AAM market. The company's multifaceted approach reflects a deep investment in the future and its potential to transform global transportation.
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SPONSORED SPEAKER

John Mora Director of Communications

John Mora, Director of Communications at Dedalian, recently offered a compelling vision of how artificial intelligence (AI) is set to revolutionize advanced air mobility (AAM). Daedalean, a Zurich-based company with additional offices in Riga and Phoenix, is leveraging AI to address fundamental challenges in the aviation sector. Established eight years ago, Daedalean's team combines expertise in aviation, software engineering, robotics, and AI to push the boundaries of what's possible in flight technology.

Mora emphasized that AI is not merely a tool but a game-changer for AAM, offering a pathway to more affordable, safe, and efficient air transportation. He underscored that current technologies often improve one aspect—safety, cost, or capacity—at the expense of the others. AI, however, promises to advance all three simultaneously.

One of the key areas where AI will make a significant impact is in what Daedalean terms situational intelligence. Mora described how AI-enabled systems will use advanced sensors and machine learning to enhance safety and operational efficiency. For example, Daedalean is developing systems to answer crucial questions in aviation: "Where am I? Where can I fly? Where can I land?" These systems rely on visual sensors and are set to be integrated with radar and lidar and other sensors in the future. The use of AI extends to improving the way aircraft perceive and interact with their environment. Mora highlighted how AI can automate tasks faster and more reliably than the human brain, particularly in visual recognition, which is essential for safe and efficient flight.



Daedalean's work includes developing AI systems that can identify potential landing sites and detect non-cooperative traffic, a feat that moves beyond theoretical concepts and into practical applications. A significant milestone for AAM will be achieving Level 4 autonomy. This level of autonomy involves fully automated or optionally piloted vehicles that can operate independently, with AI making realtime decisions without constant human intervention but with human in the control loop. Such systems will facilitate self-separation of aircraft, autonomous route planning, and enhanced communication beyond current capabilities. According to Mora, reaching this level will enable AAM to thrive in highdensity urban airspace, transforming it from a niche category into a mainstream mode of transportation. Mora's presentation highlighted that AI is poised to address the fundamental challenges of AAM, making it accessible and effective for a broader audience. By integrating AI into situational intelligence systems, Daedalean aims to create a future where AAM is not just another type of aircraft but a revolutionary approach to global mobility.

John Mora's insights underscore the pivotal role of AI in shaping the future of air mobility. Daedalean's innovative work in AI-driven aviation solutions offers a glimpse into a future where air travel is safer, more efficient, and accessible to all. As we advance towards this exciting future, AI will be at the forefront, driving the transformation of how we move about the planet.

DUNIA ABBOUD

Advanced Air Mobility Community & Project Manager International Civil Aviation Organization (ICAO)

KEYNOTE

Global AAM Forum

The International Civil Aviation Organization (ICAO) is set to host its inaugural Advanced Air Mobility Symposium from September 9 to 12, 2024. Dunia Abboud, ICAO's Advanced Air Mobility Community and Project Management Specialist, recently shared insights into this highly anticipated event, promising a comprehensive exploration of AAM's potential and challenges. Held in collaboration with the Canadian Advanced Air Mobility Institute and sponsored by Whisk, with Air Canada as the official airline, the symposium is expected to draw around a thousand participants from around the globe. The event aims to provide a robust platform for networking and knowledge exchange, attracting a diverse range of attendees including C-level executives, government officials, civil aviation authorities, and experts in the field of AAM. A key highlight of the symposium is its holistic approach to addressing AAM. Unlike conventional events that focus predominantly on technological advancements, this symposium will delve into various dimensions of AAM. The program is designed to cover a broad spectrum of topics, reflecting ICAO's commitment to a well-rounded examination of the sector. Participants can look forward to discussions on sustainability, safety management, and the economic aspects of AAM. The symposium will also address the evolving role of aviation professionals and how AAM is poised to transform the aviation landscape. These panels are expected to provide valuable insights into how AAM can be integrated into existing systems while ensuring environmental and economic benefits. In addition to these discussions, the symposium will feature exhibits and interactive sessions designed to engage participants in the latest innovations and developments in AAM.



For academia and startups, special rates and a limited number of free tickets are available, reflecting ICAO's commitment to fostering inclusivity and supporting emerging talent in the industry. Attendees are encouraged to visit the symposium's website, which provides detailed information about the program, confirmed speakers, and event sponsors. The site also includes information on exhibits and special ticket rates. For those seeking further details, Dunia Abboud invites direct contact via LinkedIn, ensuring a personalized approach to addressing any inquiries. Beyond the symposium, ICAO continues to promote advancements in uncrewed aviation and AAM through its LinkedIn page. This platform offers updates on ongoing work, upcoming events, webinars, and training opportunities, keeping the community informed about the latest developments and initiatives in the sector. The upcoming ICAO Advanced Air Mobility Symposium represents a significant milestone in the industry, providing a crucial forum for collaboration and innovation. As the event approaches, anticipation is building for the discussions and insights that will shape the future of AAM. Dunia Abboud's introduction to the event underscores its importance and the role it will play in advancing the global dialogue on air mobility.

The ICAO symposium promises to be a landmark event in the field of Advanced Air Mobility, offering a comprehensive look at the technology, policy, and economic factors driving this dynamic sector. For those seeking further details or for any inquiries, an email can be sent to aam@icao.int.

VERITY RICHARDSON

Director of Business Development Archer Aviation

KEYNOTE

Global AAM Forum

In the evolving landscape of Advanced Air Mobility (AAM), few voices are as insightful as Verity Richardson's. As Director, Business Development at Archer, a leading manufacturer of electric vertical takeoff and landing (eVTOL) aircraft, Richardson brings a wealth of experience and perspective to the table. With nearly six years in the AAM industry, she has witnessed firsthand its global growth and the excitement surrounding its future.

Archer is renowned for its commitment to creating safe, sustainable, and low-noise eVTOL aircraft. The company is on track for a commercial launch in and has already achieved significant 2025 milestones this year. Notably, Archer has received its certification basis from the FAA, completed transition flight of its aircraft ,Midnight, and has received its Part 135 Operators Certificate. These accomplishments underscore Archer's role as a pioneer in the AAM sector. Richardson addressed a critical aspect of AAM's development: public perception. Despite the industry's promising advancements, negative narratives persist, often characterized by uninformed statements about noise and environmental impact. Richardson emphasized the importance of shifting public discourse from mere acceptance to active advocacy. She argued that while acceptance suggests tolerance, advocacy reflects a community's support and recognition of the technology's benefits. Richardson highlighted positive findings from recent public perception studies. According to data from EASA and Airbus, 83% of people view AAM positively, and more than half believe the industry is safe and are supportive. Yet, there remains a disconnect between these statistics and the negative press that sometimes dominates the conversation.



This gap, Richardson suggests, stems from a need to improve how AAM benefits are communicated and understood. One key aspect of this advocacy is demonstrating the broad benefits of AAM. Richardson pointed out that eVTOLs can drive economic growth bv creating skilled iob opportunities and fostering infrastructure development. Additionally, the technology promises minimal residential impact due to its low noise and zero local emissions-addressing one of the major concerns of living near traditional airports. Drawing a parallel with the electric car market, Richardson illustrated how advancements in technology often follow a trajectory of increasing adoption as prices decrease. The growth in electric vehicle usage became exponential as the technology became more accessible. Similarly, she anticipates that AAM will experience a similar surge in adoption as costs come down and accessibility increases. Engagement at events and air shows has further reinforced Richardson's optimism. She noted the overwhelmingly positive response from attendees, especially young people and businesses eager for new opportunities and cleaner air. This first-hand feedback is invaluable for shaping the future of AAM. She underscored the importance of fostering public advocacy and engagement in AAM. As the industry progresses, creating clear communication channels and demonstrating the tangible benefits of eVTOLs will be crucial for gaining widespread support. Archer's achievements and Richardson's insights pave the way for a future where AAM is not just accepted but embraced as a transformative force.

OLGA FLEMING

Chairwoman World Sustainable Development Fund

KEYNOTE

Global AAM Forum

Olga Fleming, Chairwoman of the World Sustainable Development Fund, delivered an enlightening keynote speech, focusing on the regulatory roadmap for sustainable Advanced Air Mobility (AAM). With her extensive background in regulatory issues and sustainability, Fleming provided a comprehensive overview. She began by recognizing the United Arab Emirates (UAE) as a trailblazer in AAM regulation, noting the country's exceptional achievement in inaugurating the world's first national regulation for vertiports in 2023.

This milestone is significant, especially considering the lack of precedent and guidance from international regulatory bodies. Fleming emphasized that this accomplishment not only positions the UAE as a leader in AAM but also sets a critical benchmark for other nations to follow.

The UAE's future plans for AAM are equally impressive. Fleming highlighted several key developments, including the anticipated launch of the first vertiport by early 2026 and the expected commencement of electric air taxi services as soon as 2025. These initiatives are underpinned by strong regulatory support from GCAA which has already approved these projects.

The UAE's proactive approach to building the necessary infrastructure, including a 10,000-squaremeter vertiport in Ras Al Khaimah, exemplifies the nation's commitment to leading the way in sustainable air mobility. Fleming also addressed the broader regulatory challenges facing the AAM industry on a global scale. She stressed the need for standardized regulations across countries, advocating for international cooperation through organizations like the International Civil Aviation Organization (ICAO).



Unified standards for technical and safety protocols are essential for the global adoption of AAM, ensuring that the technology can be deployed safely and efficiently across different jurisdictions.

In addition to regulatory standardization, Fleming underscored the importance of developing clear guidelines for vertiport design, operation, and management, including zoning laws, noise regulations, and environmental impact assessments. She also emphasized the need for public-private partnerships to foster social acceptance and demonstrate the accessibility and benefits of AAM technologies. Safety and security were other critical areas of focus in Fleming's address.

She highlighted the necessity of robust safety protocols, including mandatory safety management systems, pilot and operator training, and comprehensive emergency response plans. Furthermore, Fleming stressed the importance of cybersecurity, advocating for detailed frameworks that include mandatory encryption standards, regular security audits, and proactive threat detection systems. Fleming called for greater international collaboration to build regulatory frameworks that support the global expansion of AAM. The UAE's pioneering efforts provide a model for other regions to emulate, and Fleming encouraged other countries to seek guidance and build coalitions to address the regulatory challenges of AAM. Her address serves as a crucial reminder that thoughtful regulation is key to realizing the full potential of sustainable air mobility.

JEREMY (JAM) HARTLEY

KEYNOTE

Global AAM Forum

Advanced Air Mobility (AAM) represents a transformative leap in the way we think about aviation, offering innovative solutions that promise to reshape our skies. Jeremy "Jam" Hartley, a passionate advocate for AAM, recently delivered a keynote address that underscored the critical role of people in driving this industry forward. With a career that spans both aviation and healthcare, Jam's insights offer a unique perspective on the future of AAM and the importance of collective effort in making it a reality.

Jam's journey to AAM advocacy began with his deeprooted passion for aviation, which was reignited during his time in healthcare. Despite a successful career as an operating department practitioner, Jam found himself constantly drawn back to aviation, envisioning a future where drones could transport organs swiftly between cities. This vision led him to pursue a master's degree in aviation operations, where his research focused on how AAM could revolutionize healthcare by enabling faster and more efficient transportation of medical personnel and organs.

In his keynote, Jam emphasized that the success of AAM hinges not just on technology, but on the people behind it. "Everything about AAM has to do with people," he stated. From designing and building aircraft to developing policies and ensuring safety, the human element is at the core of AAM's advancement. Jam highlighted the need for a diverse range of professionals—engineers, researchers, marketers, regulators, and advocates-to collaborate in shaping the future of this industry. A particularly poignant moment in Jam's speech was when he shared an encounter with a young aviation enthusiast.



At an air show, the boy's excitement was tempered by his concerns about the environmental impact of traditional aviation. This interaction underscored a key challenge for the industry: inspiring the next generation while addressing the urgent need for sustainability. Jam reassured the young man that the industry is actively working to decarbonize aviation and that his participation would be vital in driving these efforts forward.

Jam's address also touched on the importance of global collaboration in AAM. While acknowledging the different geographical and cultural contexts in which AAM will develop, he stressed the need for harmonized efforts to ensure its success. He urged attendees to continue advocating for AAM within their regions while fostering international cooperation. This, he argued, is essential for overcoming the challenges that lie ahead and for ensuring that AAM fulfills its potential as a sustainable and inclusive mode of transportation.

As Jam concluded, he called on all stakeholders to maintain their commitment to advancing AAM. Whether through research, policy development, or public engagement, everyone has a role to play in this evolving landscape. Jam's keynote serves as a powerful reminder that while technology is the enabler, it is people who will ultimately determine the success of AAM. The future of aviation is not just about innovation—it's about building a sustainable, collaborative, and inclusive industry that benefits everyone.

FAHAD MASOOD RESEARCH COUNCIL Advanced Air Mobility Institute

Fahad Masood, an expert in advanced air mobility (AAM) and researcher in pilot training, recently shared crucial insights into the evolving landscape of electric Vertical Takeoff and Landing (eVTOL) aircraft and the associated challenges of training pilots for urban air operations. His presentation shed light on the critical need for specialized training to prepare pilots for the unique demands.

Masood, whose research focuses on the intricacies of pilot training for AAM, clarified a common misconception: while many anticipate that all eVTOLs will be fully autonomous, the reality is more complex. The path to full autonomy will involve a phased approach. Initially, the industry will see piloted cargo eVTOLs, followed by piloted passenger aircraft, and eventually, fully autonomous passenger vehicles. This step-by-step process underscores the ongoing importance of human pilots in the AAM ecosystem. His research highlights several key areas where traditional pilot training must evolve. Unlike conventional fixed-wing aircraft, eVTOLs will operate in urban environments characterized by high-rise buildings and complex infrastructure. This shift from open skies to congested urban areas introduces new variables, including altered flight dynamics, unique propulsion systems, and varied weather conditions. Consequently, training programs must adapt to these new realities, emphasizing skills and knowledge that traditional pilot training does not cover. One significant challenge is managing urban air traffic, which requires precision and skills beyond those used in conventional air traffic management. The presence of high-rise buildings and the potential for complex emergency scenarios demand advanced training methods. Masood pointed out that current training frameworks are insufficient for addressing these complexities.



The integration of augmented reality (AR) and virtual reality (VR) into training could provide immersive, scenario-based learning experiences, preparing pilots for the unique challenges of urban environments. Another crucial aspect is the adaptation of emergency response procedures. The stakes in urban settings are high, and effective training must prepare pilots for rapid decisionmaking in emergencies. Simulation tools, including those enhanced by AR and VR, can play a vital role in preparing pilots for these high-pressure situations. He also stressed the importance of developing training paradigms that address the new skill sets required for operating eVTOLs. These include understanding the dynamics of multi-rotor propulsion systems, managing urban traffic, and applying advanced automation techniques. The goal is to ensure that pilots are not only technically proficient but also capable of handling the unique demands of urban air mobility.

As Masood concluded, the advancement of AAM is imminent, with timelines for deployment in major cities such as Dubai and London projected within the next decade. To realize this potential, the development of effective and comprehensive pilot training programs is crucial. Addressing these needs will not only enhance safety and efficiency but also foster public acceptance of urban air mobility. As Masood emphasized, the future of transportation depends on our ability to prepare pilots for this new era of aviation, ensuring that the transition to AAM is as smooth and successful as possible.

DON BERCHOFF SENIOR ADVISOR Advanced Air Mobility Institute

In the ever-evolving field of Advanced Air Mobility (AAM), accurate and granular weather data is crucial for ensuring safe and efficient operations. Don Berchoff, from TruWeather Solutions, recently shed light on how the company is addressing this need by revolutionizing weather data collection and analysis for uncrewed aerial vehicles (UAVs) and AAM technologies.

Don Berchoff, the Founder and CEO at TruWeather Solutions, shared his expertise on the challenges and advancements in weather data management. TruWeather is at the forefront of tackling the limitations of current aviation weather systems, which often fall short in providing detailed and localized information essential for UAVs and AAM operations.

Traditional aviation weather systems primarily offer data based on airport measurements and limited balloon launches, covering less than 5% of airspace with actionable weather information below 5,000 feet. This gap in coverage is particularly significant for UAVs and AAM technologies, which operate at various altitudes and in diverse environments. The conventional models fail to account for detailed cloud height, visibility, and wind conditions, creating a critical need for more refined data.

To address these challenges, TruWeather Solutions has embraced Industry 4.0 technologies. This approach integrates advanced sensor networks, Internet of Things (IoT) capabilities, crowdsourced data, and robust cybersecurity measures to enhance weather data accuracy. By collaborating with NASA, the FAA, and other key agencies, TruWeather is pioneering a shift towards a more comprehensive and reliable weather monitoring system. One of the primary goals of TruWeather is to develop a lowaltitude, urban-scale weather monitoring system.



This involves deploying diverse sensors that provide real-time data on weather conditions in urban canyons and other complex environments. The company is also working on establishing new weather policies and standards, advocating for global harmonization to ensure consistent and highquality data across different regions.

The impact of these advancements is multifaceted. Enhanced weather data can reduce operational risks and improve the economic efficiency of the AAM industry by addressing the uncertainty that currently leads to substantial revenue losses, some of which is recoverable with advanced weather systems. TruWeather's initiatives include developing high-resolution weather models based on real-time data, rather than relying solely on predictive algorithms.

Berchoff emphasized that TruWeather's solutions are designed to be adaptable and cost-effective, making them feasible for integration into various global markets. The company is actively engaged with international partners and regulators to ensure that their technologies meet the highest standards of reliability and safety.

TruWeather Solutions, under Don Berchoff's leadership, is setting a new standard for weather data management in the AAM sector. By leveraging cutting-edge technology and fostering collaboration with global stakeholders, TruWeather aims to enhance the safety and efficiency of UAVs and AAM operations. This approach not only addresses existing gaps in weather data but also paves the way for a more robust and resilient AAM infrastructure.

SELIKA TALBOTT VP OF STRATEGIC POLICY

Advanced Air Mobility Institute



In a recent address, Selika Josiah Talbott, an esteemed figure in the transportation mobility ecosystem, provided a compelling vision of the future of advanced air mobility (AAM) sector, urban transportation and its global implications. With a background spanning over two decades in corporate defense law, state operations, and federal transportation advisement, Talbott brings a unique perspective to the discussion on AAM.

Talbott opened with a passionate affirmation of her commitment to the future of mobility, highlighting the transformative potential of advanced air transport systems. Her extensive experience, including her role as a senior advisor at the U.S. Department of Transportation and her current work in autonomous vehicle consulting, underscores her deep understanding of the regulatory and operational challenges facing the industry.

At the heart of Talbott's presentation was the idea that advanced air mobility is not just a technological innovation but a crucial element in reshaping how we think about transportation and accessibility. She emphasized the importance of a supportive regulatory environment to foster the development and adoption of these technologies. Her experience in regulatory frameworks, both as a defense attorney and a state operating officer, informs her belief that effective governance is vital for the successful integration of new mobility solutions.

Talbott articulated the broad impact of AAM, stressing that it represents a leap forward in both urban and rural transportation. For rural communities with limited transportation infrastructure, AAM can significantly enhance accessibility, bridging gaps that traditional modes of transport cannot. A significant focus of her talk was on the potential benefits of AAM in emergency services. Talbott highlighted how aerial transport can expedite medical responses, making it possible to reach and assist individuals in critical situations more swiftly than conventional ground-based methods. This capability extends beyond emergency medical services to include aerial surveillance and monitoring, which can improve disaster response, environmental research, and infrastructure maintenance.

Talbott also addressed the impact of AAM on logistics and last-mile delivery. By potentially reducing the reliance on traditional freight transport, AAM can alleviate road congestion, enhance delivery efficiency, and support better logistical operations. This shift could also positively impact agriculture by offering new tools for crop monitoring and resource management.

In closing, Talbott urged attendees to embrace the transformative potential of AAM. She emphasized that this technology is poised to redefine how we travel and connect, advocating for ongoing collaboration between policymakers, technologists, and industry leaders. Her call to action highlights the importance of continued innovation and supportive policy to fully realize the benefits of advanced air mobility. Selika Talbott's insights remind us that advanced air mobility is more than just an emerging technology—it's a fundamental shift in how we envision transportation's role in our lives and communities.

ADDRESS BY CHIEF OF STAFF



I am thrilled to reflect on the success of the Global Advanced Air Mobility Summer 2024 forum. This event brought together more than 45 country liaisons and a distinguished panel of keynote speakers, all key figures in the AAM ecosystem. The gathering of such diverse global thought leaders marks a significant milestone in our Institute's mission to shape the future of flight in line with the aspirations of the global public.

The passion and commitment displayed by participants were truly inspiring. From robust discussions to innovative ideas, it is clear that the global community is deeply invested in advancing AAM. Your contributions have enriched the dialogue and laid a strong foundation for a future where advanced air mobility becomes an integral part of daily life, providing sustainable, efficient, and safe transportation solutions. We deeply appreciate your invaluable input and active participation.

Our Institute, a leader in AAM advocacy, demonstrated once again its commitment to driving progress in this critical sector. By bringing together experts and stakeholders from diverse backgrounds, we have fostered a global dialogue that unites perspectives and catalyzes action. The insights gained from this forum will propel our efforts forward as we continue to advocate for policies and innovations that align with public expectations.

We are equally grateful to our sponsors, whose generosity made this event possible. Your support has been instrumental in ensuring that the Global AAM Summer Webinar was a success. This achievement is a shared victory for all who believe in the transformative power of AAM.

I extend my heartfelt thanks to all participants, liaisons, regulatory officers, speakers, volunteers, scholars, partners, and sponsors. Your contributions have been invaluable, and I look forward to our continued collaboration in advancing the future of AAM.

Abidemi Ashiru Chief of Staff AAM Institute



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For any inquiry concerning partnership and contribution contact:

Amin Vafadar Executive Assistant amin@aaminstitute.org

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