

DIFA Expo 2023: "UAM to Take to the Skies in Daegu City Center by 2030" - Vision of 'UAM Model for Daegu' Unveiled

DAEGU, REPUBLIC OF KOREA (SOUTH), November 5, 2023 /EINPresswire.com/ -- Daegu, South Korea, envisions a "Daegu-style Urban Air Mobility (UAM)" where flying becomes part of everyday life in the city center by 2030. This vision was unveiled at the "2023 Daegu & Korea International Future Auto & Mobility Expo (2023 DIFA Expo)," held at EXCO from October 19 (Thursday) to 21 (Saturday). DIFA brought together domestic and international companies related to UAM, offering insights into the latest technological trends and the future of UAM.

Autonomous Vehicles on the ground, UAMs in the sky

Daegu Metropolitan City established a "Daegu UAM Special Pavilion" at the 2023 DIFA, where it shared its vision of building a global growth city that opens up the future skyways. It also attracted participation from leading domestic companies such as SK Telecom (SKT), Hanwha Systems, the Korea Airports Corporation, TMAP Mobility (from the K-UAM Dream Team), the Korea Land and Geospatial Informatix Corporation(LX), and Vessel Aerospace.



Sambo Motors Group unveiled their hybrid UAM for the first time at the 2023 DIFA Expo. | Photo courtesy - AVING News

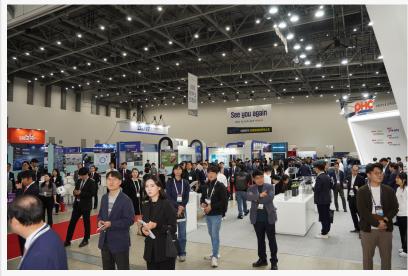


View of the Daegu UAM booth. | Photo courtesy - AVING News

Daegu Pavilion aims to glimpse the future shaped by UAM commercialization. To achieve this goal, Daegu City organized various UAM content spanning the entire urban air mobility ecosystem, from UAM reservations and traffic management to boarding, UAM vehicles, and future vertiports. Visitors to the Pavilion followed planned routes to witness UAM with their own eyes.

Daegu Pavilion also provided a detailed presentation of Daegu City's UAM project strategy. The project aims to initiate a pilot program in 2026, with full-fledged commercialization scheduled to start by 2030, integrated with the new airport. The exhibition featured a large LED display (15m x 4m), allowing visitors to watch a UAM air shuttle boarding experience. Visitors found it fascinating. Through the SKT UAM simulator, attendees had the opportunity to experience virtual reality (VR) boarding, and many shared their experiences, saying, "It feels like flying over the skies of Daegu."

Choi Woon-baek, Head of Daegu City's Future Innovation and Growth Division, stressed the importance of ensuring



Attendees at the 2023 DIFA Expo exploring the booths | Photo courtesy - AVING News



RGBLab presented Arion, its integrated autonomous mobility artificial intelligence control platform | Photo courtesy - AVING News

public acceptance for the successful development of a UAM-specialized smart city centered on the K-2 Airport and the integrated Daegu-Gyeongbuk New Airport. He said, "Securing public acceptance is crucial to this vision," and added that they would continuously explore UAM-related promotional content to provide diverse experiential opportunities.

Daegu's Sambo Motors electrifies visitors with its UAM

Daegu-based company Sambo Motors showcased a one-seater aircraft developed for the first time at this year's DIFA. The UAM presented by Sambo Motors is a hybrid vehicle based on hydrogen fuel and batteries, marking its significance as the world's first hybrid UAM model. Visitors at the expo displayed high interest in this innovative technological development.

This hybrid UAM was designed to overcome the shortcomings of traditional UAM systems, mainly focusing on the short flight time and distance. It utilizes battery power during take-off and switches to hydrogen fuel cells as the primary power source for horizontal flight at higher altitudes.

The MirX II, developed with this powertrain, boasts a maximum speed of 80 km/h and a full flight range of up to 40 km one way, with flight times reaching 35 to 40 minutes. Sambo Motors initiated the development of this hybrid UAM last year and has focused on research and development in this area.

Notably, the lithium-ion battery-based UAM developed by Sambo Motors received special airworthiness certification, making it the first of its kind in South Korea. The MirX II revealed at the DIFA is in the certification preparation phase. Sambo Motors plans to work on optimizing the flight time of the hybrid power system and apply for domestic and international patents.

Simultaneously, Sambo Motors is working on the domestic production of related technologies, including weight-lightened aircraft, power distribution devices, and position and attitude control devices. They are also conducting various environmental tests and safety and reliability evaluations. Sambo Motors plans to apply for technology certification in the first half of next year.

RGBLab introduces the integrated autonomous mobility Al control platform

RGBLab, a mobility company based in Daegu, also made a name for itself as a participating company in the 2023 DIFA. Recently selected as a promising venture company at the ABB High Growth Companies 50 presentation ceremony, RGBLab has garnered attention from various organizations and businesses as a next-generation leading company.

The ABB High Growth Companies 50 program launched this year to discover and nurture 50 growth potential ABB companies by 2026, aiming to establish the foundation for Daegu's industry in the next 50 years.

RGBLab unveiled its integrated autonomous mobility artificial intelligence control platform, "Arion," at the 2023 DIFA. "Arion" was developed to serve as an independent solution in various fields, including disaster safety, logistics, scientific research, environmental applications, firefighting, transportation, military, and security, by assisting and replacing human missions. During the exhibition, a simulator allowed visitors to experience a program where they could "fly" above the downtown area of Daegu, which houses Yangsan University.

One of the attendees left feedback, saying, "If I were to board a UAM, I imagine it would feel like this." In addition to the UAM, RGBLab introduced its flagship products, such as the artificial intelligence edge computer, "Arion IMC," remote control software, "Arion GCS," ample data cloud

storage, "Arion HUB," integrated control solution, "Arion CTW," and monitoring application, "Arion VUE."

Since 2017, Daegu has hosted the Future Auto & Mobility Expo (DIFA Expo), now in its 7th edition. This year's event encompasses various aspects of the mobility industry, from ecofriendly cars (electric and hydrogen) to electric components, autonomous driving, and urban air mobility (UAM). The Ministry of Land, Infrastructure, and Transport and the Ministry of Trade, Industry, and Energy of the Republic of Korea co-hosted the event. They have focused on presenting the technological achievements made over the years and introducing the latest policy directions in preparation for the era of fully autonomous driving services and commercialization of UAM, expected between 2027 and 2030.

Davis Kim
AVING News
+82 2-856-3276
email us here
Visit us on social media:
Facebook
LinkedIn
Instagram
YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/666383552

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.