

K-UAM to Demonstrate the Future of Our Urban Air Mobility

Released Date: 23 November 2022 Department in Charge: UAM Policy Team Contact: Annie KIM/ Global Media Communicator/ <u>audiis2@korea.kr/</u> +82 44 201 3056

First time demonstration of the flight and the full course of its service with the aircraft produced by domestic SMEs, alongside the Casual Talks together with MOLIT, Startups, and the Youth Foundation to share UAM's vision with the young

The Ministry of Land, Infrastructure and Transport (MOLIT, Minister WON Hee-ryong) revealed that the flight demonstration as an annual event since 2020 with an intention to enhance its public acceptance of Urban Air Mobility (hereinafter 'UAM'), which is the core of the future mobility, will be hosted in Gimpo (Ara Marina) from 09:15 a.m. on 23 November 2022.

* Urban Air Mobility: High-tech transportation system for the next-generation to safely and conveniently transport people and cargo in urban environments based on electric power & less-noise aircraft, and vertiport

This event will be attended by around 400 participants of key officials from the industry, academia, and research institutes, including the National Assembly member KIM Joo-young; heads of local governments such as Gimpo Mayor; President of Korea Airports Corporation; President of Korean Institute of Aviation Safety Technology; Representative of private companies such as Hyundai Motors and Hanwha Systems, etc. along with students and citizens.

At this event, which marks its third anniversary this year, will encourage companies to develop airframes and *provide an opportunity to promote their

own technology by **demonstrating the flight of airframes (2 units) produced by Korean companies for the first time.

*(Event in 2020) Chinese airframe made in China (Ihang Co.) was used / (Event in 2021) Airframe made in Germany (Volocopter GmbH) was used

**(Flight Demonstration 2022) V-space and Voltline / (Exhibition of airframe) Hyundai Motor Company, Hanwha Systems, OPPAV (Joint R&D by the MOLIT and Ministry of Trade, Industry and Energy), Award-winning airframe at UAM Olympiad (3rd airframes), etc.

Company (Airframe Name)	Photo	Specifications	Performance
V-Space (V-speeder)		Maximum takeoff weight: 250KG Empty weight: 130KG Payload: 120KG Dimension: 3680*3680*1750(mm)	Max speed:95km/h Flight time: 15 minutes Maximum cruising distance: 20km
Voltline (SKYLA-V2)		Maximum takeoff weight: 300KG Empty weight: 150KG Payload: 70KG Dimension: 2400*2627*2667(mm)	Maximum speed: 90km/h (economic speed 60km/h) Flight time: 20 minutes Maximum cruising distance: 25km

[Domestic airframe model for flight demonstration]

(Source: Companies)

In addition, a vertiport for the UAM airframes to take off and land is actually created in a building (remodeling of an existing building)* to show examples of UAM-based infrastructure facilities that will be built in our cities in the future.

*(F1) Boarding check-in area (Reservation platform, biometric check-in, walk-through security, etc.) -> (F2) Passenger lounge (Exhibition hall, conference room, and UAM simulator, etc.) -> (Rooftop) UAM airfield

Meanwhile, to enhance the understanding of the Korean people on how to use

UAM and to establish a national consensus on the convenience of its use, Minister Won will demonstrate all aspects of UAM use, from reservation, procedure, boarding, to landing (Directing the scenario below at the event site)

STORE STORES			
1. Reservation	2. Boarding a self- driving car	3. Arriving at Bertie Port	4. Procedure
(Reservation through service APP)	(Boarding the connected transportation)	(Implementing a vertiport in the city)	(Simple check-in procedure)
5. Boarding	6. City flight	7. Landing	8. Moving
(Boarding the UAM airframe)	(Directing UAM airframe flight)	(Arriving at the vertiport) at destination	(Moving to the event venue after landing)

[Site Scenarios related to UAM Usage]

Moreover, as a connected transportation for the UAM use, a self-driving car made by a Korean company (ThorDrive) will be used during the event, and the innovative aspects of future mobility planned by the Korean government will be comprehensively implemented.

Separately, the MOLIT and the Youth Foundation will host "The 6th rounds of Casual Talks together with MOLIT, Start-ups, and the Youth Foundation at the event spot this time, and the 6th meetings of the Communication Relay for Start-ups are designed to revitalize the new industry in the land and infrastructure field.

Next, the attendees and the Minister Won will discuss government policies and corporate support measures, such as UAM laws and systems and support for

technology development. In particular, attendees are expected to be deeply interested in the government-supported program (Grand Challenge) *that will be operated from next year for UAM flight tests and demonstrations, sharing the recognition that the private sector and the government must work together to revitalize the industrial ecosystem consisting of airframes, transportation systems, and airfields (vertiport).

* Implementation of demonstration in real environment to verify the safety of Korean UAM and prepare appropriate safety standards (Phase 1: Demonstration of open area in Goheung, Jeollanam-do (2023~) / Phase 2: Semiurban/Urban demonstration (2024~)

Also, as a side event, "UAM International Conference" will be held at the conference room at 1:30 pm, and there will be in-depth discussions on ① preparation of the UAM transportation system and certification promotion trends in major countries, ② Business promotion of domestic and foreign companies in the UAM industry, ③ the current status of UAM demonstration and pilot projects in major countries.

In particular, leading organizations and companies from various fields such as FAA (Federal Aviation Administration), EASA (European Aerospace Agency), Vertical Aerospace (Airframe maker,UK), and Onesky (network company, US) are expected to lay the groundwork for global cooperation in future discussions on policies and technology standardization.

Minister Won said, "As the UAM is a game changer in urban transportation that allows people to get out of the increasingly congested roads and to use the sky road, the government will actively play its role in areas such as promotion of pilot projects based on cooperation with private sectors, enactment of laws focusing on special exceptions to regulations, R&D for technological competitiveness, and international cooperation, so that a new transportation system can be established as early as possible.