

SMART119 inc.

Press release

1 April 2024 AirMobility Inc. Chiba University Smart119 Inc.

Autopilot flight demonstration by AED-loading drone with navigation system and briefing session was conducted.

On 29 March 2024 (Fri) at Kiminomori Golf Club, AirMobility Inc. (Minato-ku, Tokyo; President & CEO: Hisashi Asai), Chiba University National University Corporation (Graduate School of Medicine Emergency Intensive Care Medicine: Professor Takaaki Nakada, Disaster Therapy Research Institute: Associate Professor Taku Oshima) and Smart119 Inc. (Chiba City, President/CEO: Takaaki Nakada) conducted a demonstration and briefing session on the automatic transport of AEDs to their destinations by drones using an air navigation system. AED-loading drone with navigation system Automatic operation demonstration and briefing session.



In this demonstration event, an air navigation system developed by AirMobility Inc. was mounted on a drone to automatically transport the AED to the destination.

Assuming that a person has collapsed on the course, the location information is transferred to the navigation system by pressing a button on the smartphone app at that location, which automatically generates an optimal flight route from the AED storage location to the destination. The flight route is transferred to the drone's flight controller, and the AED is transported to its destination by independent flight, and system interoperability and transport time of the entire automatic AED transport by drone were confirmed.

Image of automated AED-loading drone operation.



■Location/flight route

Approx. 400 m within Kiminomori Golf Club (2-49, Kiminomori Minami, Oamishirasato-shi, Chiba)



Source: GSI website

■Aircraft used

Manufactured by Prodrone Co. Airframe weight: 12.3 kg (including battery) Maximum payload: 10 kg Maximum speed: 60 km/h



■AEDs in use

Automated External Defibrillator manufactured by Nihon Kohden Corporation Dimensions (mm) W 206 x H 97 x D 252 Weight (Kg) Approx. 2.4 (including disposable pads and battery pack)



<Results of the demonstration experiment>

In this demonstration event, the drone operated automatically along a flight route automatically generated by the navigation system based on the location data from the smartphone application transmitted from a point within the Kiminomori Golf Club, and transported the AED to its destination approximately 400 m away in 3 minutes 30 seconds.

<Future plans>

Based on the content of this experimental event, we will study the operation system and aim to popularise AED drones on golf courses, and also provide better services in cooperation with Smart119

Inc., a service to improve the efficiency of emergency calls and first-aid activities. We will also aim to spread the use of AED drones not only on golf courses but also on a wide range of other sites.

<Companies cooperating in the demonstration experiment>

• AirMobility Inc. (sponsor of the demonstration experiment and provider of the drone navigation system/application system)

• Graduate School of Medicine, Chiba University Department of Emergency and Critical Care Medicine (Cooperation in the planning, implementation and verification of the effectiveness of the demonstration experiment from the perspective of the emergency and disaster medical field).

- Research Institute of Disaster Medicine Chiba University (same as above)
- Smart119 Inc.

(cooperation in planning, implementing and validating the effectiveness of demonstration experiments from the perspective of emergency medical ICT system development).

- Tokio Marine & Nichido Fire Insurance Co. (Insurance)
- Nihon Kohden Corporation (provision of AEDs)
- Prodrone Co. (dispatch of pilots)
- Kiminomori Golf Club (provision of test site).

< Demonstration Organizer Profile>

Smart119 Inc.

Smart119 was established in 2018 to implement the results of research and development adopted by the Japan Agency for Medical Research and Development (AMED) for emergency medical treatment research and development in society. It developed a platform system aimed at 'faster and more correct emergency medical care', which was launched in Chiba City in 2020 and is currently provided to several municipalities, including Chiba Prefecture, Higashihiroshima City and Kawasaki City. We are creating secure future medical care by using original and flexible ideas and the latest technology.

URL: https://smart119.biz

AirMobility Inc.

AirMobility was established on 1 August 2019 with the aim of building a system infrastructure on a platform for the sale and servicing of 'flying vehicles' and to provide a one-stop shop for services related to the operation of 'flying vehicles'. The core system of the infrastructure platform will be developed in-house and linked to navigation systems, take-off and landing field systems, etc., to provide services to ensure that 'flying cars' can be operated safely and securely.

URL: https://www.airmobility.co.jp/

Enquiries regarding this matter. AirMobility Inc. Nagase & Miyamoto TEL: 03-6273-1288 Email: info@airmobility.co.jp