

(Joint Release)

November 30, 2021

Japan Airlines Co., Ltd. MEDIPAL HOLDINGS CORPORATION

JAL × MEDIPAL

Started Joint Study on Pharmaceuticals Transportation Using Drones

 \sim Aiming for a prosperous and sustainable society

where all citizens can enjoy high-quality medical care \sim

Japan Airlines Co., Ltd. (Headquarters: Shinagawa-ku, Tokyo; President Yuji Akasaka of Representative Director; Hereinafter, "JAL") and MEDIPAL HOLDINGS CORPORATION (Headquarters: Chuo-ku, Tokyo; Representative Director, President & CEO: Shuichi Watanabe, Hereinafter, "MEDIPAL") announced that we have launched a joint study (Hereinafter, the Joint Study) to build a sustainable logistics network utilizing drones, with the aim of realizing a society where all people can enjoy highquality medical care.

1. Demonstration Test in Sumoto City, Hyogo Prefecture

On October 27 and 28, 2021, the two companies carried out a successful demonstration test in Sumoto City, Hyogo Prefecture, using drones for transport between pharmaceuticals bases.

This demonstration test was hosted by NEDO (*1) as part of the DRESS Project (*2) which utilizes the smart drone platform of KDDI CORPORATION (Head Office: Chiyoda-ku, Tokyo; President, Representative Director; Makoto Takahashi) in which JAL participates.

JAL is responsible for the operation and safety management of drones, making use of aviation safety's know-how in the air transport business. Logistics division of MEDICEO CORPORATION (Head Office: Chuo-ku, Tokyo; Representative Director, President and CEO : Yasuhiro Choufuku,), a wholly owned subsidiary of MEDIPAL, provided model pharmaceuticals, and Awaji FLC (*3) established relationships with local governments and medical institutions.

*1: New Energy and Industrial Technology Development Organization

*2: Drones and Robots for Ecologically Sustainable Societies project URL: https://nedo-dress.jp/en/

*3: Sales and distribution centers that supports a stable supply of products close to customers (Front Logistics Center)





< Mounting of model pharmaceuticals >

<Drone taking off from MEDICEO Awaji FLC>

«Overview of demonstration test»

- Takeoff and landing point: MEDICEO Awaji FLC parking lot ⇔ HYOGO PREFECTURAL AWAJI MEDICAL CENTER rooftop garden
- Route: Over Sumoto-gawa River (The drones flew over seven bridges including Sumoto Bridge. About 5 km round trip)
- · Aircraft: PD6B-Type C (Prodrone), (W) 1874 x (D) 2060 x (H) 474 mm, Max Payload 30 kg
- · Items transported: Model pharmaceuticals (maximum gross weight 5kg)
- Results: In addition to the normal flight of 2.5 round trips over the route, several simulations assuming irregularity were completed.

Related Release: November 24, 2021 "Demonstration Test was Held in Hyogo-prefecture with an Eye toward Drone Level4 Operation in Urban Areas." URL: <u>https://press.jal.co.jp/en/release/202112/006405.html</u>



<The drone flight route>

2. Background and Purpose of the Joint Study

At present, Japan faces social risks such as an increase in the number of people with difficult access to medical care and transportation due to the declining birthrate, aging population and depopulation, deepening natural disasters, and new epidemics in infectious disease. Therefore, it is necessary to build a system that can stably distribute pharmaceuticals and other products that protect the lives of the people, regardless of peacetime or emergency situations.

In addition, as climate change due to global warming becomes a global issue, it is extremely important for companies to achieve the SDGs in their business activities.

Through the Joint Study, the two companies aim to build a sustainable logistics network that can respond to disasters and other emergencies by meeting the needs of the region and utilizing electric drones with environmental performance, and to create a prosperous and sustainable society in which all citizens can enjoy high-quality medical care.

3. Content of the Joint Study

- (1) Market research and business potential verification of drone transport and related transport in pharmaceuticals
- (2) Cooperation in demonstration test
- (3) Study of measures to improve social acceptance of drones
- (4) Consider building a supply system for pharmaceuticals in times of disaster and toward achieving the SDGs through the use of drones



[Japan Airlines Co., Ltd.] <u>Establishment</u>: August 1, 1951 <u>Head Office</u>: Nomura Real Estate Tennozu Building, 2–4– 11 Higashishinagawa, Shinagawa-ku, Tokyo <u>Representative</u>: Yuji Akasaka, Representative Director, President <u>Number of Consolidated Employees</u>: 36,060 (as of March 31, 2021) <u>Common stock</u>: 273.2 billion yen (as of the end of March 2021) <u>Business description</u>: Scheduled air transport services, unscheduled air transport services, aerial work services, any other incidental or related business

[MEDIPAL HOLDINGS CORPORATION]

Establishment: May 6, 1923

Head Office: 2-7- 15 Yaesu, Chuo-ku, Tokyo

Representative: Shuichi Watanabe, Representative Director, President and CEO

Number of Consolidated Employees: 13,062 (as of September 30, 2021)

Common stock: 223.98 billion yen (as of September 30, 2021)

<u>Business description</u>: As a holding company, MEDIPAL controls, administers and supports the operating activities of companies in which it holds shares in the Prescription Pharmaceutical Wholesale Business; the Cosmetics, Daily Necessities and OTC Pharmaceutical Wholesale Business; and the Animal Health Products and Food Processing Raw Materials Wholesale Business, and conducts business development for the MEDIPAL Group.