

(Joint Release)

April 27, 2026
Japan Airlines Co., Ltd.
JAL Ground Service Co., Ltd.
GMO AI & Robotics Trading Co., Ltd.

Japan's First Demonstration Experiment for Utilizing Humanoid Robots at Airports Begins

—Aiming to Achieve Labor-saving and Efficiency in Ground Handling Operations—

Tokyo, JAPAN—JAL Ground Service Co., Ltd. (President & CEO: Yoshiteru Suzuki, hereinafter "JGS"), responsible for ground handling operations (such as aircraft towing and baggage/cargo loading and unloading) at major domestic airports for the JAL Group, and GMO AI & Robotics Trading Co., Ltd. (President & CEO: Tomohiro Uchida, hereinafter "GMO AIR"), which promotes the social implementation of AI and robotics within the GMO Internet Group, will launch a demonstration experiment for the utilization of humanoid robots at airports, the first of its kind in Japan, starting in May 2026.



Ground handling operations are conducted in environments that rely heavily on human manual labor, such as operating various shapes of Ground Support Equipment (GSE) within limited spaces around aircraft. Conventional fixed automated facilities and single-function robots have had difficulty adapting flexibly to these existing infrastructures and complex operational workflows. This project, therefore, focuses on "humanoid robots" that possess a range of motion and adaptability comparable to humans, and is set to begin a demonstration experiment. Being human-shaped allows their introduction without significant modifications to existing airport facilities or aircraft structures. In the future, these robots are expected to be used across a wide range of tasks, from loading baggage to cabin cleaning, and even operating GSE. By combining cutting-edge AI technology with the unique flexibility of humanoid forms, the project aims to realize a sustainable operational structure through labor savings and workload reduction.

【Background】

Currently, the aviation industry faces a serious challenge in ground handling labor shortages due to factors such as an increase in inbound tourism coupled with a declining working-age population. Ground handling operations require highly skilled personnel to maintain safety, such as aircraft marshalling and baggage/cargo handling, while also imposing significant physical burdens. In response to this situation, JGS and GMO AIR have agreed to leverage their respective strengths and commence a demonstration experiment to verify the potential for humanoid robots to achieve labor savings and workload reduction in ground handling operations.



[Overview of the Demonstration Experiment]

This project, commencing in May 2026, involves mid-to-long-term phased verifications . Initially, operations at airport sites will be visualized and analyzed to identify areas where humanoid robots can operate safely. Subsequently, repeated operational verifications simulating actual airport environments will be conducted, with the ultimate goal of establishing a sustainable operational structure through labor savings and reducing workload by having humanoid robots complement human tasks.

■Details of the Demonstration Experiment

Item	Content
Implementation Period	May 2026 – 2028 (planned)
Objective	Labor-saving and efficiency in ground handling operations through humanoid robot utilization
Scope of Study	General ground handling operations such as loading/unloading of baggage and cargo, cabin cleaning
Target Airport	Haneda Airport

■Roles of Each Company

JAL Ground Service Co., Ltd.:

Leveraging experience and technology cultivated since its establishment in 1951, JGS will provide expertise on airport operations, define business requirements, and evaluate safety standard compliance. Based on extensive operational experience at major domestic airports, the company will drive issue identification toward practical application and consideration of solutions.

GMO AI & Robotics Trading Co., Ltd.:

As the trading company responsible for AI and robotics business within the GMO Internet Group, GMO AIR will provide humanoid robots and develop and optimize their motion programs. Utilized Know-how gained from its "Humanoid Dispatch Service" and the "GMO Humanoid Lab Shibuya Showcase"—a physical AI research and development hub opened on April 7, 2026—GMO AIR will construct robot solutions tailored to airport operations.

[Future Outlook]

Through this demonstration experiment, both companies aim to establish an environment in which humanoid robots can operate safely and effectively on the frontlines of airport operations. By offering new AI and robotics technology solutions to the industry-wide challenge of human resource shortages in ground handling operations, this initiative will contribute to sustainable development in the aviation industry and promote work-style reform at airports. Furthermore, the GMO Internet Group designates 2026 as the "First Year of Humanoids" and is committed to solving social issues through the fusion of AI and robotics. This demonstration experiment represents a crucial step toward accelerating the social implementation of humanoid robots, with continued efforts to realize a society where humans and robots coexist through collaboration across diverse industries.