



日本空港ビルディング株式会社

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September 26, 2017

Haneda Robotics Lab
Japan Airport Terminal Co., Ltd.

Haneda Robotics Lab Aims to Introduce Robots in Airports Haneda Airport Robot Experiment Project 2017

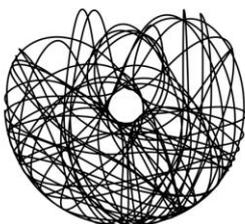
Call for 2nd Round of Participating Enterprises to Commence on September 27

Japan Airport Terminal Co., Ltd. (JATC; Address: 3-3-2 Haneda-Kuko, Ota-ku, Tokyo; Representative: Nobuaki Yokota, President & COO), which manages and operates Haneda Airport, established the Haneda Robotics Lab in 2016 to conduct demonstration experiments of robotic products (including prototypes) at Haneda Airport with the aim of verifying robot technologies.

Continuing on from its first round of demonstration experiments conducted last year, Haneda Robotics Lab will conduct its 2nd round of demonstration experiments in the Haneda Airport Robot Experiment Project 2017. For the 2017 project, three new categories, which will be different from last year's themes, have been decided and a public call will be launched for participating enterprises in those categories on Wednesday, September 27.

Taking advantage of the Ministry of Economy, Trade and Industry's Robot Introduction Demonstration Program, the Lab's Project is an initiative that aims for the realization of the government's Reform 2020 Project. It is conducted with the cooperation of the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of Economy, Trade and Industry.

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▪ **Project Objectives**

Haneda Airport is making efforts to further raise the quality of the services at its passenger terminals and increase the satisfaction of airport patrons in the lead-up to 2020. However, with the size of Japan's working population in decline and in a social environment that calls for action to improve productivity in response to Working Style Reform, Haneda Airport believes that the use of robotics technology is essential to solving a range of operational challenges at the airport. With this in mind, JATC, in collaboration with the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of Economy, Trade and Industry, with the aim of verifying the use of robotics technology and promoting introduction of quality robots, will conduct a demonstration experiment project, and will make a public call for participants.

The project also aims to establish an environment for enterprises to engage in the development of robots that would be highly effective in public facilities, based on the demonstration data obtained in the environment of an airport terminal. In this year's demonstration experiments, with the aim of providing services through the collaboration of robots and people and between robots themselves, JATC will embark on the development of a communications environment for exclusive use by robots and of platforms for communications between robots and airport management systems.

The benefits that Haneda Robotics Lab anticipates this project will bring, include encouraging the general public to become more familiar with robots by creating situations in which a variety of robots are seen working in all areas of the airport, a ripple effect on society at large by deploying robots in society to solve various problems, and creating excitement and communicating the examples of the various test projects to the world.

▪ **Overview of Public Call for Participants**

- Call Period Wednesday, September 27 – Wednesday, October 25, 2017
- Experiment Period Late November 2017 – End of January 2018 (to be confirmed)
- Experiment Location In Haneda Airport passenger terminals *Locations coordinated according to robots chosen.
- Special Website <https://www.tokyo-airport-bldg.co.jp/hanedaroboticslab/>
- Call Categories Security robots

Envisages use of robots for detection and warning of suspicious items, discovery of and response to facility abnormalities, dealing with people requiring assistance and lost children, guiding passengers during emergencies, extinguishing fires, security patrols, and assistance with such operations.

Logistics/transportation-related robots

Envisages use of robots as porters for passengers' hand luggage, for storeroom operations, product checking operations, in-terminal logistics operations, construction materials haulage operations, and assistance with such operations.



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Translation-related robots

Envisages robots that can be used for translation, multilingual guiding operations, product sales operations, signage and production of documentation, etc., equipment for assisting employees with translation, software for the operation of PCs, mobile devices, etc. and other similar functions.

▪ **Information Session for Enterprises and Developers**

An information session will be held to explain the details of the project and the public call for participants as follows. This will include an overview explanation of the project and the criteria for responding to the public call. A question and answer session will also be held. Any enterprises and developers who wish to attend should check the details below and lodge a request to attend.

* Attendance or non-attendance of this briefing will not affect selection of robots for the project.

- Date and Time: Tuesday, October 10, 2017, 13:30 – 15:00 (TBC)
- Venue: Galaxy Hall, 6th floor, Domestic Terminal 1, Haneda Airport
https://www.tokyo-airport-bldg.co.jp/service_facilities/multipurpose_hall/
- How to Apply: Please e-mail your company name, name of participant's representative, and number of people attending to the public call desk (haneda_robolab@jat-co.com) by Friday, October 6.
 - * If the number of requests to attend exceeds the venue capacity, places will be allocated on a first-come-first-served basis.
 - * If there are too many attendees, we may also consult with you about the number of your attendees.

(Reference) Results of First Round of Demonstration Experiments

For the first round of demonstration experiments, applications were received from 23 companies for 23 robot types in three categories – information, movement support, and cleaning. These applications were examined and 17 robot types from 17 companies were chosen to participate in the demonstration experiments. The experiments took place over about 500 hours for two and a half months at Haneda Airport, Domestic Terminal 2.

During that time, approximately 5,000 airport patrons interacted with the demonstration robots. Their impressions included comments such as “The robot age has arrived,” “It’s so cute!” and “I want one at my company.” People from the companies involved in the demonstration experiments also praised the project. One person described it as a valuable experience to be able to actually operate their robot in a public space, which is different from trade shows and the like, while another said that it provided unprecedented findings that will be extremely useful in future development.



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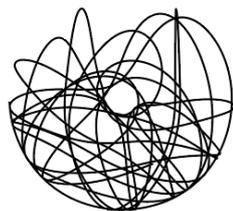


After the demonstration experiments had concluded, the Project Secretariat participated in a total of five seminars and similar events in Japan and overseas, including Future Travel Experience Global 2017 and Pepper World 2017, reporting on and sharing the knowledge and discoveries that had been accumulated through this project.

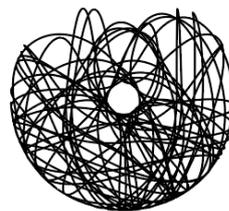
Around ten of the robots that took part in the project, whose initial effectiveness had been confirmed, are still being trialed today in actual operations. For example, Haneda Robotics Lab is working with the manufacturers of CAIBA (Indy Associates) in the Information Robots category, SE-500iX II (Amano Corporation) in the cleaning category, and INMOTION R1EX (A.M.Y. Creative) in the movement support category to continue the experiments, making its own modifications and adjustments, with a view to introducing the robots into operations in earnest.

▪ **About the Haneda Robotics Lab Logo**

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Left: Former logo from 1st Round Right: New logo for 2nd Round

The Haneda Robotics Lab logo depicts the trajectories of a duplex pendulum, a structure in which one pendulum is connected to another pendulum. In our quest to implement robotics technologies in society, what will happen when the two elements of “humans” and “robots” are connected in the environment that is Haneda Airport? What kinds of relationships will be formed between humans and robots? Haneda Robotics Lab sees as its mission the observation and verification of those relationships. That mission is expressed by depicting the connection between humans and robots as a duplex pendulum. The logo for the 2nd round of the project is based on that from the 1st round, but depicts a longer period in which the pendulums’ motion is tracked. It is an expression of the very process of Haneda Robotics Lab, as it continues its testing in its quest for harmony between robots and humans.

▪ **About the Haneda Robotics Lab Project**

- Organizer: Japan Airport Terminal Co., Ltd.
- Secretariat: Information Services International-Dentsu, Ltd.



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- **Enterprise/Developer Inquiries**

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- **Media Inquiries**

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