

ANA to Test Driverless Bus Inside Haneda Airport

- After initial successes, ANA to begin the second phase of autonomous bus testing.
- Goal is to implement driverless bus technology at Haneda Airport by 2020.

TOKYO, Jan. 15, 2019 – All Nippon Airways (ANA), Japan's largest and 5-star airline for six consecutive years, is beginning the second stage of testing for an autonomous, driverless bus at Tokyo's Haneda Airport.

ANA is conducting these trials with Aichi Steel, SB Drive Corp., Advanced Smart Mobility Co., Ltd., NIPPO CORPORATION, and NEC Corporation. Together, these companies will begin testing the autonomous bus today in a series of trials running through Jan. 25, 2019. The test will be conducted with an autonomous driving technique equivalent to Level 3*¹ and will be limited to the restricted area of Haneda Airport where aircraft and cargo vehicles are located. If these trials are successful, ANA aims to implement the driverless bus technology into the airport by 2020.

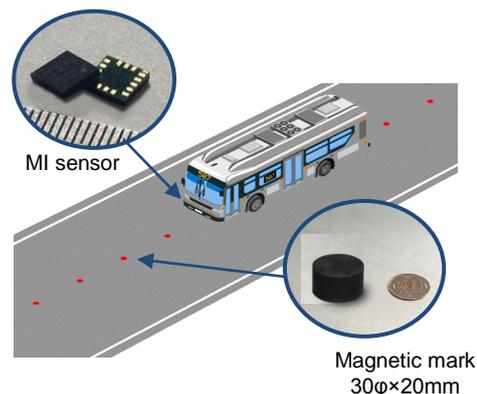
*1 Level 3 means that the autonomous system is operating, but when the system is unable to respond correctly, a human driver in the vehicle can take over the driving.

“At ANA, we are constantly striving to move the industry forward,” Shigeru Hattori, Senior Vice President of ANA. “This autonomous bus will help ease the flow of traffic in the airport and help enhance the traveling experience for passengers. In addition to boosting convenience, the autonomous bus will also allow for safer travel within the airport and we will continue the tests until the technology reaches our high safety grade.”

The first phase of testing was conducted in February 2018 in partnership with SB Drive Corp. In addition to ANA's trials at Haneda this time, testing will also take place at Narita, Sendai, and Nagoya airports by other companies.



The bus which will be used for the trial



The autonomous bus will run with the help of magnetic trackers embedded into the ground that will help guide the bus along its route. Onboard sensors will allow the bus to follow these marks and will enable the bus to travel smoothly even if GPS signals are unavailable.

During testing, the bus will also host an advanced control system called, “Dispatcher,” which will make it possible for the operator to monitor progress in real time and take control when needed. The system

provides constant real-time feedback that the operator can use to evaluate the interior and exterior of the vehicle at all times.

The autonomous bus is only the latest example of how ANA is working to remain at the forefront of technology and customer service. By easing the workload of employees working at Haneda, ANA aims to create more efficient service for those traveling through the airport in the future.

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About ANA

Following the “Inspiration of Japan” high quality of service, ANA has been awarded the respected 5-Star rating every year since 2013 from SKYTRAX. ANA is the only Japanese airline to win this prestigious designation six years in a row. Additionally, ANA has been recognized by *Air Transport World* as “Airline of the Year” three times in the past 10 years - 2007, 2013 and 2018, becoming one of the few airlines winning this prestigious award for multiple times.

ANA was founded in 1952 with two helicopters and has become the largest airline in Japan, as well as one of the most significant airlines in Asia, operating 78 international routes and 118 domestic routes. ANA offers a unique dual hub model which enables passengers to travel to Tokyo and connect through the two airports in the metropolitan Tokyo, NARITA and HANEDA, to various destinations throughout Japan, and also offers same day connections between various North American, Asian and Chinese cities.

ANA has been a member of Star Alliance since 1999 and has joint venture partnerships with United Airlines, Lufthansa German Airlines, Swiss International Airlines and Austrian Airlines.

Besides the full service and award winner carrier ANA, the ANA Group has two LCCs as consolidated subsidiaries, Vanilla Air Inc. and Peach Aviation Limited. The ANA Group carried 53.8 million passengers in FY2017, has approximately 39,000 employees and a fleet of 260 aircraft. ANA is a proud launch customer and the biggest operator of the Boeing 787 Dreamliner.

For more information, please refer to the following link.

<https://www.ana.co.jp/group/en/>