

ANA Unveils its “ANA AVATAR Vision” to Democratize Physical Transportation and Become the Airline for All

TOKYO, March 13, 2018 – ANA is proud to unveil its “ANA AVATAR Vision” – a multi-faceted breakthrough endeavor to advance and pioneer real-world avatar technologies. Real-world avatars will integrate multiple exponential technologies such as robotics, haptics, AR/VR, and AI to enable humanity to instantaneously teleport their presence, consciousness, knowledge and skills to a remote location.¹

The avatar concept was initially conceived by ANA at the inaugural XPRIZE Visioneers Summit in 2016, where it received top honors from XPRIZE and 250 members of its ecosystem of top world leaders and influencers (<https://www.ana.co.jp/group/en/pr/201610/20161005.html>). The launch of the ANA AVATAR Vision marks the official start of the next chapter in ANA’s ever-expanding and accelerating avatar endeavor. ANA is confident this technology will allow humanity to finally break through the barriers of distance, time, and culture that exist in our world to bring about an era of unprecedented physical connection, resource-sharing, mutual understanding and global abundance (<https://ana-avatar.com/english.html>).



ANA has always been committed to connecting people for the betterment of society and the world. Today's announcement is a reinforcement of this corporate commitment and is an important milestone in fulfilling the core vision of the “super-smart” society initiative announced in the ANA Group mid-term corporate strategy for FY2018-2022. ANA is leading this growing avatar movement with an increasing number of partners from government, industry, and academia.²

The ANA AVATAR Vision is composed of the following four pillars:

1. \$10M ANA Avatar XPRIZE

The cornerstone of ANA’s Avatar Vision is the four year, \$10 million ANA Avatar XPRIZE

(<https://avatar.xprize.org>) which was officially launched at South By Southwest® yesterday (<https://www.ana.co.jp/group/en/pr/201803/20180312.html>). The aim of the ANA Avatar XPRIZE is to captivate and synthesize the minds of experts, researchers and entrepreneurs around the world to fuel the development and integration of the key avatar technologies. This will accelerate the realization of ANA's bold vision of a world that is seamlessly and physically connected with advanced, general-purpose avatars that will empower anyone on Earth to teleport their consciousness and skills to a remote location on Earth or beyond.

The winning team of the ANA Avatar XPRIZE will combine state-of-the-art technologies to demonstrate a robotic avatar that allows an untrained operator to complete a diverse series of tasks, from simple to complex, in a physical environment at least 100km away. Two milestone competitions will take place in April 2020 and April 2021, respectively, during which all teams will compete for a \$1M prize purse each year. The \$8M grand prize will be awarded in October 2021.

2. ANA AVATAR Oita Test Field

ANA has launched the world's first avatar test field, in partnership with Oita Prefecture in southern Japan, to boost research and development of existing avatar technologies. The "ANA AVATAR Oita Test Field" will leverage the resources of the entire prefecture to become the premier avatar testing hub. Testing will focus on avatar use-cases in an array of areas including space exploration, healthcare, education, fishing & agriculture, and tourism. Avatar testing at the ANA AVATAR Oita Test Field has already commenced and will rapidly grow in scope and scale. ANA, in collaboration with the Japan Aerospace Exploration Agency (JAXA) and other strategic partners in industry, government, and academia plan to break ground for a mock space facility in Oita to research, test, and advance technologies that leverage avatars to accelerate humanity's exploration of space.

3. ANA AVATAR Crowdfunding

ANA's crowdfunding platform, WonderFLY, will be leveraged to raise market awareness, participation, and capital for avatar development. Teams participating in the ANA AVATAR XPRIZE and innovators with core avatar technologies are welcome to utilize the platform for the advancement of their respective visions. Avatar-related projects have already been registered and have begun fundraising on WonderFLY.

4. ANA AVATAR Service Platform

The final pillar of ANA's all-encompassing vision is its original avatar service platform which will rapidly release avatar services into the marketplace. Avatar service concepts that are successfully designed, tested, and proven at the ANA AVATAR Oita Test Field will immediately be developed and released to the public via the ANA AVATAR application which is currently under construction. This application will allow anyone in the world to easily connect to a remote avatar and will form the basis for the world's newest form of physical transportation.

As the sole provider of global long-distance physical transportation, the airline industry has long served as the catalyst for global relationships, collaboration, business, diplomacy, and mutual understanding. With the official release of the ANA AVATAR Vision, ANA will spearhead the avatar initiative to magnify its ability to provide this core service to the entire world and become an airline for all.

1: What is an Avatar

An avatar is essentially a robot that is remotely controlled by a human. It is a new technology that will enable a person to see, hear, feel, and interact freely in a remote environment in real-time through the integration of multiple exponential technologies. Various avatar systems are currently in development but each consist of an operator apparatus (pilot) and remote apparatus (avatar) that are in complete

synchronization. The intentions of the operator are transmitted to the remote avatar and the resulting sensations of sight, sound, and touch detected by the remote avatar are fed back to the operator.

Avatars will allow anyone to teleport their consciousness to a remote location. As a result, humanity will be able to share its global resources more efficiently and seamlessly. In the future, general purpose avatars will allow doctors, teachers, scientists, engineers, artists, and skilled laborers to share their skills wherever they are needed and whenever they are needed using a single avatar unit

2: Current ANA AVATAR Vision Partners

- **Oita Prefecture**
ANA AVATAR Test Field collaboration partner
- **Hiroshima Prefecture**
ANA AVATAR “Commitment to Peace” partner
- **Japan Aerospace Exploration Agency (JAXA)**
ANA AVATAR space exploration partner
- **NTT DOCOMO, SoftBank, KDDI**
Telecommunication infrastructure partners for ANA AVATAR testing
- **Hiroshima Peace Memorial Museum**
ANA AVATAR use-case test partner (promotion of peace)
- **Okinawa Churaumi Aquarium / Okinawa Churashima Foundation**
ANA AVATAR use-case test partner (tourism)
- **Kanazawa Institute of Technology**
ANA AVATAR use-case test partner (education)
- **Shimano**
ANA AVATAR hardware technical support partner
- **Japan Air Terminal / Haneda Robotics Lab**
ANA AVATAR use-case test partner (airport services)
- **TechShop Japan / Fujitsu**
ANA AVATAR hardware development support partner
- **ADDIX**

ANA AVATAR service design partner



For information on how to join the “ANA AVATAR Vision” movement, please visit the ANA AVATAR Vision website (<https://ana-avatar.com/english.html>) or contact info@ana-avatar.com.

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About ANA

Following the “Inspiration of Japan” high quality of service, ANA has been awarded the respected 5-Star rating from SKYTRAX for 5 consecutive years starting in 2013. 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 85 international routes and 116 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 52.1 million passengers in FY2016, 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.