

Introduction

ANA Group Space Business

ANA Group

ANA Group (ANAG) leverages a global network and worldwide customer platform to operate air transportation and other businesses.

ANA HOLDINGS INC. is the holding company responsible for raising sustainable group value through effective management resource allocation and support for the independent management of group companies.



ANAG Space Business Introduction

ANA HOLDINGS INC. (ANAHD) and ALL NIPPON AIRWAYS TRADING CO., LTD. (ANATC) are now leading the development and promotion of space businesses across three domains:

- ◆ Space Transportation
- ◆ Data Link via Sky & Space
- ◆ Supply Chain Management for Space Systems

ANAHD, the holding company of the ANA Group, is expanding its aviation expertise, such as aviation personnel training, maintenance technology and operational knowledge to the space transportation industry. It also conducts activities like observation through the effective combination of satellites and aircraft. Furthermore, its subsidiary, ANATC, leverages its trading functions to apply its proven track record, knowledge and networks from the aviation industry to the space industry, such as establishing a low-cost & high-quality supply chain for the satellites.

Since ANAG have been doing multiple businesses including R&D so far, ANAG is recognized as one of the leading runners of Japanese “NEW SPACE” company.

Next stop, space

ANAG Space Business Organization



Mission

Mission:

We, ANAHD and ANATC, aim to connect with those seeking aviation-derived knowledge and networks within each of the ANA Group's three business domains and provide the solutions for the development of space industry.

Positioning:

ANAG stands very unique position in the space business;

- ◆ Only airline operator working on the multiple space businesses
- ◆ Service provider on B2C, as well as B2B & B2G
- ◆ High reliability and hospitality based on the name of "ANA"

Potential Partners:

While we possess a strong brand and network in Japan, our market extends globally. Our potential partners are those interested in and seeking astronaut training, vehicle maintenance knowledge and techniques, safety operation knowledge, observation from aircraft, satellite component sales, payload sales, or other aviation-derived solutions.

ANA Group's Space Business Initiatives

◆ Domain: Space Transportation, handled by ANAHD and ANATC

■ Launch Foreign Space Ship from Japan



Attracting Virgin Orbit to Japan.
(It ended due to the application of Chapter 11)

■ Astronaut Training



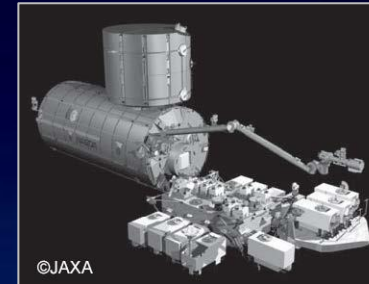
Providing training to new JAXA astronaut candidates at ANA training facility by arranging ANA crew training.

■ Maintenance of Reuseable Rocket



Joint research with JAXA for maintenance of reusable rocket based on the aircraft maintenance method and knowledge

■ Japanese Experiment Module (JEM) Utilization Integrator



Research to accelerate commercial usages of JEM for the future business in the CLDs.

■ Satellite Transportation



Transportation of Astroscale satellite from Japan to New Zealand by ANA Cargo.

■ Space Life Product

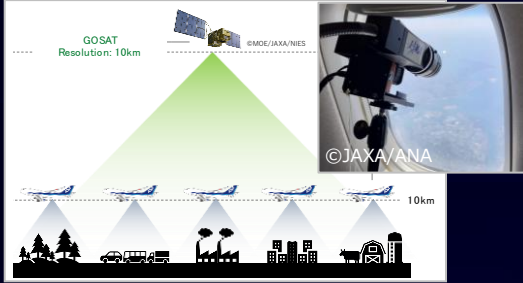


Joint development with POLA for space-inspired cosmetics, "COSMOLOGY". Proven flight heritage on the ISS.

ANA Group's Space Business Initiatives

◆ Domain: Data Link via Sky & Space, handled by ANAHD

■ Greenhouse Gases Observation from Aircraft



Joint research with JAXA to observe greenhouse gases from aircraft. Intending to expand the number of observation targets.

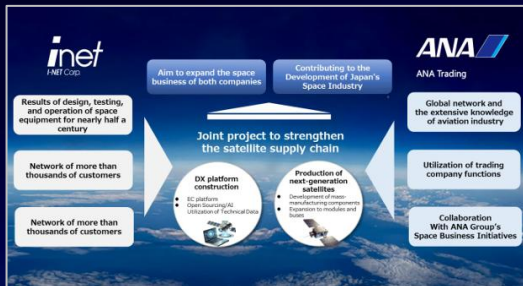
■ Turbulence Prediction



Development of AI-powered turbulence prediction with Keio University by combining satellite and aircraft data. BlueWX Co.,Ltd. was founded in 2023.

◆ Domain: Supply Chain Management for Space Systems, handled by ANATC

■ Constructing a Satellite Supply Chain



Comprehensive business alliance agreement with I-NET Corp. to support the strengthening of Japan's satellite supply chain.

■ Space Demonstration Services by Suborbital Spaceplane



Business alliance with Dawn Aerospace New Zealand Ltd. to introduce space demonstration services in the Japanese market including potential operation in Japan.

■ Satellite Engines



Capital and business alliance with Letara Ltd. to strengthen overseas sales and optimize the supply chain.

■ Superconducting Magnetic Torquer for Satellite Attitude Control



Business alliance with Zenno Astronautics Ltd. to deploy superconducting technologies for space applications in the Japanese market.