

News Release

For Immediate Release

All Nippon Airways and Hitachi Unveil Japan's First Airline "Operations Brain" System, Enabling Rapid, Optimal Flight Schedule Revisions During Disruptions

- All Nippon Airways, in partnership with Hitachi, developed a new system that can automatically formulate fast and optimal revision plans for flight schedules to address disruptions from bad weather and other challenges.
- By combining All Nippon Airways' operational expertise with Hitachi's planning optimization technology, the partners developed and began operating the system in July.
- The system shortens flight schedule revision times by several hours, helping minimize customer impact during irregularities.



TOKYO, July 15, 2025 – To reduce disruption impacts on customers, All Nippon Airways (ANA) and Hitachi, Ltd. (Hitachi), in collaboration with Hitachi Consulting Co., Ltd. (Hitachi Consulting), launched a system that automatically and rapidly generates optimized flight schedule revisions during disruptions affecting ANA's domestic flight operations. This system was jointly developed by combining ANA's operational expertise with Hitachi's technological capabilities. This is the first time a Japanese airline has implemented such a system.

The system dynamically collects and analyzes large amounts of data, including aircraft operation schedules, maintenance plans, crew schedules and various airport conditions, to autonomously generate multiple revised schedule proposals. It intelligently adapts to real-time changes, including modifications to maintenance plans, airport or runway closures and consecutive irregular events across multiple airports. ANA's operations staff can then swiftly review and select the most effective option, significantly reducing decision times and improving operational performance.

Previously, ANA relied heavily on the expertise of seasoned operations staff, which created challenges in both human resource development and the time required to formulate optimal schedule revisions that consider complex conditions within a limited timeframe. Therefore, innovation in operation management was needed.

Recognizing these challenges, ANA, Hitachi and Hitachi Consulting began developing the system in 2019¹. Extensive trials confirmed that the system's proposals match the quality of schedules produced by highly experienced operations staff while reducing work time by several hours, especially during large-scale disruptions. For example, in scenarios where typhoons severely disrupted flight operations, veteran ANA staff with more than a decade of experience previously spent entire nights manually adjusting schedules to minimize impact.

With the implementation of this new system, we can now:

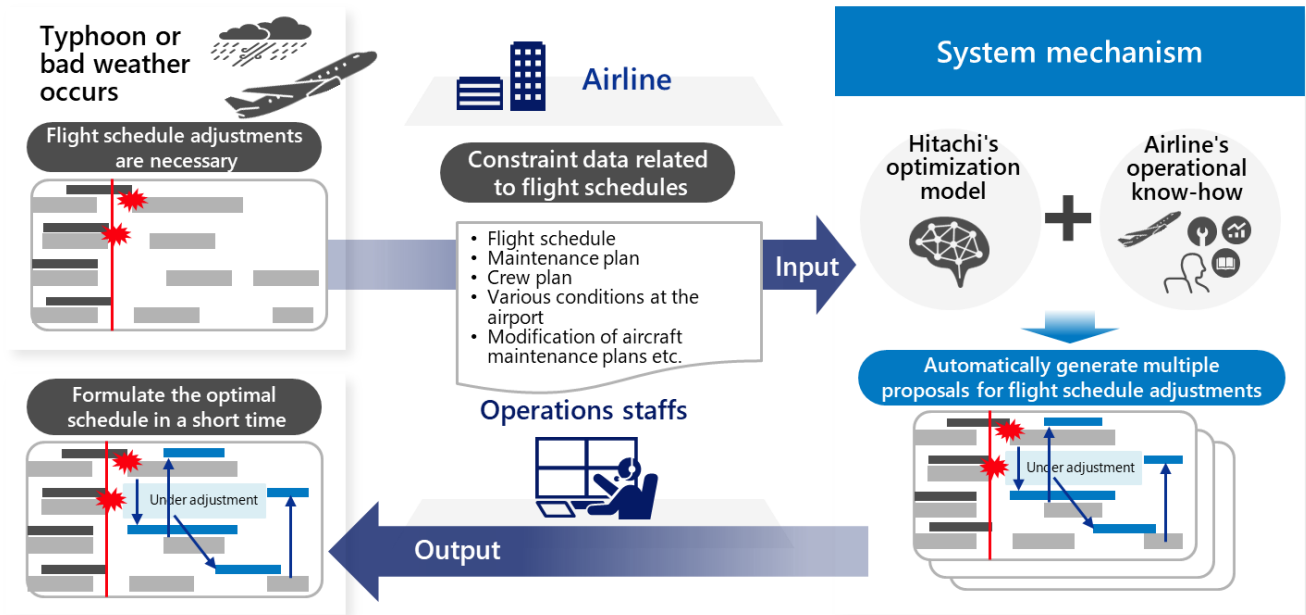
- Reduce the time needed to consider revisions by up to 70%.
- Respond flexibly and repeatedly to changes in weather forecasts, such as typhoon paths and speeds.
- Relieve the mental stress on operations staff who are pressured to quickly create and decide on schedule revisions.
- Improve flight stability by allowing for the rapid comparison of multiple revision options.

These benefits are expected to enable faster communication to our customers, which will in turn lead to an enhanced customer experience.

Amid the global push for digital technology in the aviation industry, this system boasts exceptional accuracy in two key areas: its versatility to automate solutions for any disruption, from major events to daily issues, and the comprehensiveness to replicate the operational quality ANA has honed in a challenging environment like Japan, with its frequent typhoons and complex flight paths.

ANA continues to drive digital transformation by integrating advanced technologies with human expertise, striving to set new global standards for operational excellence. For more information on this system and ANA's flights, please visit the ANA website.

Hitachi will plan to expand this system as the Lumada² solutions. The initiative will extend capabilities to ANA's international operations and other airlines worldwide, supporting critical social infrastructure. Then we aim to improve the productivity of frontline workers and enhance people's well-being.



Overview of this system

¹ March 5, 2020: [ANA and Hitachi Engage in Demonstration Experiment to Confirm the Effectiveness of Automatic Recovery Plan Technology for Flight Schedule Revisions.](#)

² [Lumada](#): A collective term for solutions, services, and technologies based on Hitachi's advanced digital technologies for creating value from customers' data accelerating digital innovation.

Business Contact

Hitachi, Ltd.

Connective Industries

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About ANA

Founded in 1952 with just two helicopters, All Nippon Airways (ANA) has grown to become the largest airline in Japan. Today, ANA HOLDINGS Inc. (ANA HD) is recognized as one of the World's Most Admired companies by Fortune.



ANAHD was established in 2013 as the largest airline group holding company in Japan, comprising 71 companies. It offers three distinct airline brands: ANA, Peach, the leading LCC in Japan, and AirJapan, launched in 2024 for international routes covering Asia.

ANA's legacy of superior service has earned SKYTRAX's 5-Star rating every year since 2013, making it the only Japanese airline to win this prestigious designation for 12 consecutive years.

ANA is also a four-time recipient of the ATW Airline of the Year award, recognized for excellence in aviation.

ANAHD has been selected as a member of the Dow Jones Sustainability World Index list for eight consecutive years and the Dow Jones Sustainability Asia Pacific Index list for nine consecutive years.

For more information about ANA and ANA HD, please visit: <https://www.ana.co.jp/group/en/>

A STAR ALLIANCE MEMBER 

About Hitachi, Ltd.

Through its Social Innovation Business (SIB) that brings together IT, OT(Operational Technology) and products, Hitachi contributes to a harmonized society where the environment, wellbeing, and economic growth are in balance. Hitachi operates globally in four sectors – Digital Systems & Services, Energy, Mobility, and Connective Industries – and the Strategic SIB Business Unit for new growth businesses. With Lumada at its core, Hitachi generates value from integrating data, technology and domain knowledge to solve customer and social challenges. Revenues for FY2024 (ended March 31, 2025) totaled 9,783.3 billion yen, with 618 consolidated subsidiaries and approximately 280,000 employees worldwide. Visit us at www.hitachi.com.

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
