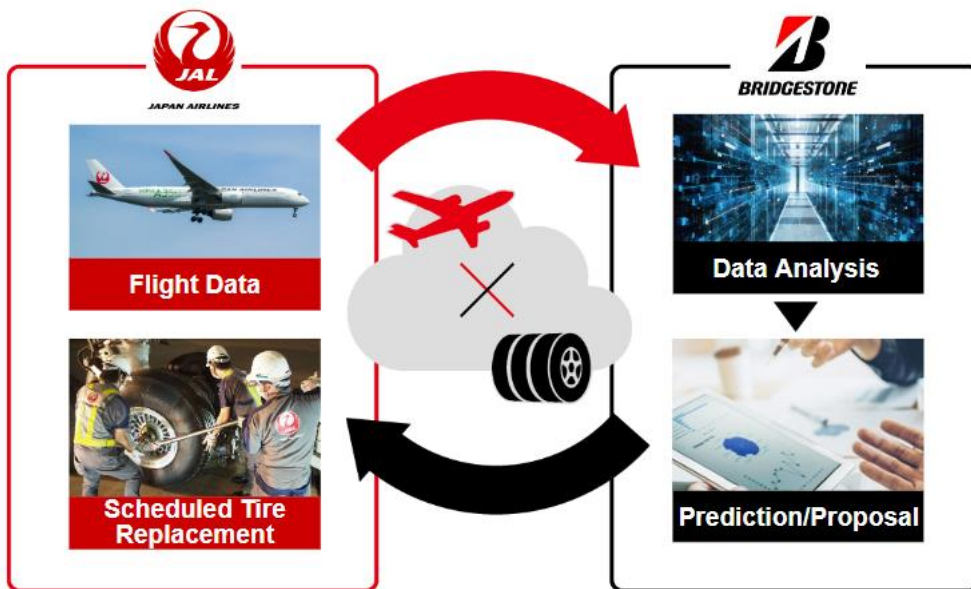


(Joint Press Release)

July 22, 2024
 Japan Airlines Co., Ltd.
 Bridgestone Corporation

Japan Airlines and Bridgestone Expand Tire Wear Prediction Technology to Large Jet Aircraft

Tokyo, JAPAN — Japan Airlines Co., Ltd. (hereinafter referred to as JAL) and Bridgestone Corporation (hereinafter referred to as Bridgestone) have expanded the application of tire wear prediction technology to implement scheduled tire replacement operations for large jet aircraft, including the Airbus A350-900, which has been operated by JAL since May 2024.



Tire Wear Prediction Operating Procedures

Aircraft tires must have guaranteed safety and security and ensure the takeoff and landing of aircraft under harsh conditions, including heavy load, high speeds, and a wide range of temperatures. Typically, aircraft tires need to be replaced after several hundred takeoffs and landings. However, the rate of tire wear varies depending on a variety of factors, such as the usage conditions for a given aircraft or at a given airport. This condition has made scheduling tire replacements difficult, leading to replacements being treated as an unscheduled task, which can result in the sudden need to replace tires or multiple tires around the same time. To address this issue, Bridgestone partnered with JAL to develop operating procedures that enable scheduled tire replacements. By combining JAL’s aircraft insights and flight data with Bridgestone’s tire expertise and digital tire wear prediction technologies, highly accurate predictions of the optimal time to replace tires have been formulated. Since May 2020, these procedures have been in place for the regional jet aircraft operated by J-AIR Corporation.

With four years of experience, the use of these procedures has contributed to improved efficiency in tire replacement operations, lower and more consistent stocks of tires and wheels, as well as subsequent reductions in CO2 emissions from the production and use of such items. Moreover, tire replacement operations have transformed from an unscheduled task into a scheduled task with the accurate prediction model, which has also contributed to reforming the workstyles of maintenance staff by reducing unscheduled overtime while also improving the quality of maintenance through the expansion of preventive maintenance.

Based on their combined expertise and insights, JAL and Bridgestone have advanced tire wear prediction technology and its applications. The use has been expanded from being limited to specific regional jet aircraft to now include large jet aircraft operated by JAL.

Looking ahead, JAL and Bridgestone will continue such collaboration in order to create new value, which contributes to the development of the aviation industry.

Comment from Ryo Tamura, Director, Managing Executive Officer and Senior Vice President of Engineering and Maintenance, Japan Airlines Co., Ltd.:

This initiative, which may seem simple at first glance but is actually a very challenging endeavor, represents one of the most significant examples of digital transformation (DX) within our company. We are deeply grateful for Bridgestone's expertise and the application of their digital technologies, which have greatly contributed to improving and streamlining our work environment, as well as enhancing safety and security.

Looking ahead, we will continue to advance the collaboration between our two companies, creating new value and contributing to the development of aviation technology and society.

Comment from Nobuyuki Tamura, Vice President and Senior Officer, G-MICA (Global Mining, Industrial, Construction, and Aviation Tire Solutions Business), Bridgestone Corporation:

We are delighted to contribute to maximizing the productivity and economic value of tire replacement operations, as well as to sustainability, by combining the real insights and learnings gained from value co-creation with JAL's on-site staff with digital technologies. Moving forward, we will continue to amplify social and customer value based on the co-creation between our two companies and remain committed to the "Efficiency," "Ecology," and "Empowerment" pillars outlined in our corporate commitment, the "Bridgestone E8 Commitment." (*1)



- *1 The Bridgestone Group established its corporate commitment, the “Bridgestone E8 Commitment,” to help it realize its vision: “Toward 2050, Bridgestone continues to provide social value and customer value as a sustainable solutions company.” This commitment will serve as the Group’s axis to drive management while earning the trust of future generations. The [“Bridgestone E8 Commitment”](#) consists of eight uniquely Bridgestone values starting with the letter “E” (Energy, Ecology, Efficiency, Extension, Economy, Emotion, Ease, and Empowerment) that the Group will commit to creating through distinctly Bridgestone purposes and processes, together with employees, society, partners, and customers to help realize a sustainable society.

About Japan Airlines

Japan Airlines (JAL), Japan’s first private aviation company, was established in 1951 and is a member of the oneworld® Alliance. The airline operates a fleet of 227 aircraft (as of March 2024) and began renewing its international long-haul aircraft with the Airbus A350-1000 starting 2023 Winter Schedule. Together with other JAL Group and partner airlines, JAL offers an extensive domestic and international network that serves 384 airports across 64 countries/regions. The airline has received numerous accolades for its exceptional service, including being recognized as a certified 5-Star Airline by Skytrax and being awarded the prestigious “World Class” Airline title by APEX, the Airline Passenger Experience Association. The airline is dedicated to ensuring the highest standards of flight safety and overall service quality, striving to be the most preferred airline by customers worldwide.

For details and to learn more, visit JAL’s official website at <https://www.jal.com/en/>.

About Bridgestone Corporation

Bridgestone Corporation, headquartered in Tokyo, is the world’s largest tire and rubber company. In addition to tires for use in a wide variety of applications, it also manufactures a broad range of diversified products, which include industrial rubber and chemical products and sporting goods. Its products are sold in over 150 nations and territories around the world.