

JAL – First in the World to Introduce a new method of Engine Foam

Wash for regional jets

January 27, 2022

Japan Airlines Co.,Ltd.(Headquarters: Shinagawa-ku,Tokyo,President: AKASAKA Yuji Representative Director;hereinafter JAL),has contracted with GE Aviation(hereinafter GE)to develop the first 360 Foam Wash cleaning method for aircraft engines of J-AIR Corporation which provide aircraft engines(hereinafter “J-AIR”),based at Osaka Itami International Airport. This is the first introduction in the world for CF34 engines installed on Embraer 170 aircraft operated by J-AIR, and the first introduction in the world for regional jets.



To reduce CO2 emissions, JAL periodically cleans aircraft engines to improve fuel efficiency. In addition to the current water-based cleaning (water cleaning), we will introduce foam cleaning. In conventional water cleaning, water is atomized and sprayed into the compressor of the engine, but in foam cleaning, a special heated foaming cleaning agent is injected into the engine to chemically remove dust and dirt particles inhaled during flight. This reduces CO2 emissions by decreasing fuel consumption through improved fuel economy. Estimates are that foam wash can save J-AIR up to 82,000 liters of fuel a year compared to cleaning the airline's CF34 engines with water wash. This, is equivalent to reducing CO2 emissions by up to 285 metric tons a year.

JAL has formulated the JAL Group's Medium-Term Management Plan for Fiscal Years 2021-2025, and is working to reduce CO2 emissions through engine washing along with efforts to reduce air resistance during flight, such as setting flaps at shallow angles during descent while ensuring safety, and stopping the engine on one side during ground transportation, in order to achieve the government's goal of "Carbon Neutral by 2050.

JAL will continue to take on the challenge of solving global environmental issues in order to fulfill its responsibility to pass on a prosperous planet to future generations.