



JAL's San Francisco Service Receives Qualification for its Implementation of Operational Procedures to Reduce the Environmental Footprint

TOKYO October 03, 2013: The implementation of operational procedures to reduce the environmental footprint has been introduced on JAL's San Francisco service by Asia and Pacific Initiative to Reduce Emissions (ASPIRE)*and today, JAL was the first Japanese airline to be qualified for its performance on San Francisco route. The following three measures have been conducting on San Francisco route with an aim of reducing fuel burn and greenhouse gas emissions, thus reducing aviation's impact on the environment. The implementation of those measures would yield a total annual saving in fuel burn of approx. 460,000 lbs. (250,000 liters) or 658,000 kg less CO2 emissions.



1. User Preferred Route(UPR)

A UPR is defined as a lateral profile developed for each individual flight by the airline. These lateral profiles are customized in order to meet the specific needs of the airline for that flight, such as fuel optimization etc. Typical a UPR will be calculated by each flight dispatch based on factors such as forecasted winds and convective weather etc.

Eligible routes with JAL: Hawaii, Australia, the western coast of North America (including San Francisco)

2. Continuous Descent Operations(CDO)

CDO is an operation, enabled by airspace design, procedure design and ATC facilitation, in which an arriving aircraft descends continuously to the greatest possible extent, by employing minimum engine thrust, ideally in a low drag configuration, during final descent phase of a flight.

Eligible airport with JAL's flights: San Francisco International Airport and Kansai International Airport

3. Oceanic Separation Minima(30/30)

Improvements in navigation capabilities have enabled reduction in the Oceanic separation minima to 50NM longitudinally and 50NM laterally. When coupled with direct controller pilot communications via data-link and automatic dependent surveillance, aircraft meeting certain navigation performance requirements can be safely separated at as little as 30NM longitudinally and 30NM laterally. Qualified aircraft navigating in airspace where these reduced separation minima have been implemented achieve significantly greater efficiencies than aircraft that cannot meet these standards.

Eligible routes with JAL: Hawaii, North America

*ASPIRE

In February 2008, a multi-lateral partnership known as the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) was created in Singapore. The first air navigation service providers (ANSPs) to sign the ASPIRE joint statement were Airservices Australia, Airways New Zealand, and the Federal Aviation Administration. Since 2007 Aspire has expanded to include the Japan Civil Aviation Bureau (JCAB) and the Civil Aviation Authority of Singapore (CAAS) as major partners. Aeronautical Radio of Thailand Limited (AEROTHAI) formally joined the ASPIRE partnership in June 2011. JAL's San Francisco service was qualified by "ASPIRE Daily" (The red line/route in the figure).

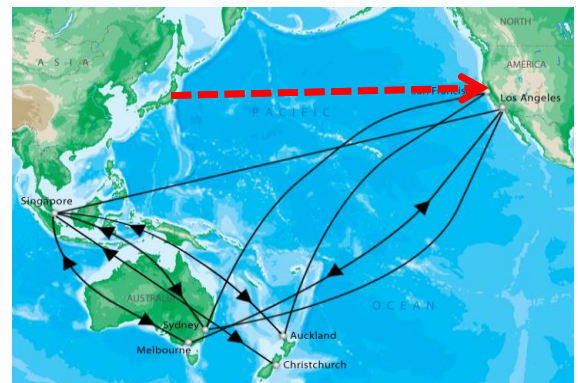


Figure: Best practices for ASPIRE Daily routes

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