A new theory to reduce shock waves significantly for supersonic transport aircraft was established by Prof. Kusunose of COE program and his group

Invited visiting professor of COE program (Institute of Fluid Science), Prof. Kusunose, and his group has successfully established a new biplane configuration which can eliminate shock waves of supersonic transport significantly. The theory introduce a second wing nearly parallel to the conventional wing and proved that the interaction between the two wings will cancel the shock wave effects felt at the ground by 85%, using the super computer at the Institute of Fluid Dynamics to calculate. Because one of the fundamental problems preventing commercial transport aircraft from supersonic flight is the generation of the strong sonic booms, new theory is a highly promising candidate in the achievement of nearly boomless supersonic flight in the near future.

Contact:
Prof. Shigenao Maruyama
Institute of Fluid Science
Tohoku University
Tel:022-217-5243
E-mail : maruyama@ifs.tohoku.ac.jp