

Low-boom supersonic aircraft model points to fast future

October 18 2012



Credit: NASA/Michelle M. Murphy

(Phys.org)—If human beings are ever to fly faster than the speed of sound from one side of the country to another, we first have to figure out how to reduce the level of sonic boom generated by supersonic flight.

Earlier this fall, a subscale model of a potential future low-boom



supersonic aircraft designed by The Boeing Company was installed for testing in the supersonic wind tunnel at NASA's Glenn Research Center in Cleveland.

This model is a larger of two models used in the test. The model contains a force measurement balance used to capture force measurements (lift, drag). Depending on the type of test and on the tunnel, the model can be oriented any way. Pictured here, the model is actually upside down.

Another smaller model was used to capture measurements of the off-body pressures that create a <u>sonic boom</u>.

The tests are among those being conducted by NASA and its partners to identify technologies and designs to achieve a level of sonic boom so low that it barely registers on buildings and people below.

Provided by NASA

Citation: Low-boom supersonic aircraft model points to fast future (2012, October 18) retrieved 27 April 2024 from

https://phys.org/news/2012-10-low-boom-supersonic-aircraft-fast-future.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.