

Image: A laser-sharp view of blended wing body plane design

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Credit: NASA/David C. Bowman

Engineers at NASA's Langley Research Center in Hampton, Virginia,



used lasers inside the 14- by 22-Foot Subsonic Tunnel to map how air flows over a Boeing Blended Wing Body (BWB) model – a greener, quieter airplane design under development.

The name for the technique is called <u>particle image velocimetry</u>.

If you look closely you can see the light bouncing off tracer particles. Cameras record the movement of those particles as the laser light pulses across the <u>model</u>. This allows researchers to accurately measure the flow over the model once the images are processed. A smoother flow over the wing means less fuel will be needed to power the aircraft.

Provided by NASA

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