

New Blended Wing Body (BWB) Aircraft – Is 50% Fuel Reduction a Credible Claim?

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Rendering of the JetZero BWB, which could be the next generation US tanker.
By US Air Force, <https://www.af.mil/News/Photos/igphoto/2003282050>, Public Domain.

Startup companies are convinced the Blended Wing Body (BWB) configuration will revolutionize flight and will use "up to 50% less fuel than today's commercial jets" (www.jetzero.aero). The US-based companies are **JetZero** and **Natilus**. In December 2025, **Outbound Aerospace** had to shut down, running out of funding. In contrast: "Substantial fuel reduction cannot be expected for passenger aircraft" is the research result from a former **HAW Hamburg** project featuring a **flying BWB demonstrator** called AC20230 with a span of 3 m. The presentation will guide the audience through the aeronautical disciplines and show with real numbers and a few equations what to expect beyond unfounded promises and artist's impressions. However, a viable application could be a BWB tanker. Large parts of such an aircraft could remain unpressurized, and like the Northrop B2 bomber, the BWB offers low-observable (stealth) characteristics. Even more important: The U.S. Air Force needs a tanker replacement and has funds available. In 2023, the U.S. Air Force awarded a \$235-million contract to JetZero to build a full-scale demonstrator by 2027 in partnership with Scaled Composites (Northrop Grumman).