World Academy of Science, Engineering and Technology
International Journal of Aerospace and Mechanical Engineering
Vol:18, No:10, 2024

Technical Specifications of Bombardier Challenger 605 SN 5769 Aircraft

Authors : Rohan Sarker, Jon P. Conlon

Abstract : The Bombardier Challenger 605 SN 5769 is a versatile business jet known for its superior range, advanced avionics, and spacious cabin. Powered by two General Electric CF34-3B engines, each producing 8,729 pounds of thrust, the aircraft offers a maximum range of 4,000 nautical miles, allowing for non-stop transcontinental flights. It operates at a maximum cruising speed of Mach 0.82 (541 mph) and a service ceiling of 41,000 feet, ensuring efficient, high-altitude travel. The aircraft's avionics suite is equipped with the Rockwell Collins Pro Line 21, offering advanced navigation, communication, and weather systems. The cockpit features dual Flight Management Systems (FMS) and GPS to enhance operational safety and precision. Inside, the Challenger 605 boasts a luxurious and customizable cabin that accommodates up to 12 passengers. The aircraft also provides ample baggage space, excellent short-field performance, and impressive fuel efficiency, making it ideal for business or personal long-range travel.

Keywords : aircraft, airframe, Bombardier, engines
Conference Title : ICAA 2024 : International Conference on Aeronautics and Aeroengineering
Conference Location : Paris, France
Conference Dates : October 28-29, 2024