

Dassault Aviation launches Falcon 6X, setting new standard in long-range large-cabin segment

New twinjet to offer best-in-class comfort and performance

Dassault Aviation recently unveiled the Falcon 6X, the most spacious, advanced and versatile twinjet in business aviation. This new 5,500 nm aircraft will make its first flight in early 2021 and begin deliveries in 2022.

Pratt & Whitney Canada's PurePower PW800 engines have been selected to power the Falcon 6X that offers the largest, quietest and most comfortable cabin of any aircraft in its class and more cabin volume than any other Falcon ever designed. It comes equipped with the industry's most advanced digital flight control and cockpit technologies, drawing on heritage from other recent Falcon models and fighter jet programs.

The 6X is largely based on the Falcon 5X aerodynamics and system features which were validated during the 5X preliminary flight test program. It has been optimized to take advantage of the new engine, offering a greater range and a longer cabin.

"We wanted to further push the boundaries with this new aircraft, to provide the best flight experience possible using today's aviation know-how," said Eric Trappier, Chairman & CEO of Dassault Aviation. "The Falcon 6X will offer a mix of range, comfort and capability no other large cabin business jet can match while guaranteeing fully mature systems and a proven powerplant."

The Falcon 6X cabin is six feet, six inches (1.98 m) high and 8 feet 6 inches (2.58 m) wide – the highest and widest cross section in a purpose built business jet – and is nearly 40 feet 8 inches (12.3 m) long. The cabin can accommodate 16 passengers in three distinct lounge areas, affording room for multiple configurations including a large entry way/crew rest area and a spacious rear lounge.

Every element of cabin style and design has been totally rethought, the result of an extensive survey of customer tastes and inputs from Dassault Aviation's own in-house Design Studio.

Flowing uninterrupted lines enhance the feeling of space and declutter the cabin.

Significantly more natural light floods into the cabin

thanks to 29 extra-large windows including a unique galley skylight – the first in business aviation – designed to provide additional brightness in an area usually devoid of natural light. "The industry has been moving towards ever wider and higher interiors, and customers told us what they wanted most in our new Falcons was more space," continued Trappier. "So we designed the Falcon 6X from the cabin out, making it as passenger-centric as we could while still delivering the high performance and other flying qualities that customers value in Falcons."

The Falcon 6X has a top speed of Mach 0.90 and a maximum range of 5,500 nautical miles (10,186 km), longer than any other jet in its category. It can fly directly from Los Angeles to Geneva, Beijing to San Francisco or Moscow to Singapore at long range cruise speed. It can also connect New York to Moscow, Paris to Beijing or Los Angeles to London at a cruise of Mach 0.85.

The Pratt & Whitney Canada PurePower PW812D engine rated at 13,000-14,000 lbs thrust has been selected to power the Falcon 6X. The PurePower PW800 engines feature the common core technol-



ogy of the Pratt & Whitney Geared Turbofan, which is shared by 16 different engine applications and have amassed over 585,000 flight hours.

Equipped with a low maintenance single piece fan and emission reducing Talon combustor, the PurePower PW800 engines offer the highest efficiency, reliability and maintainability in the 10,000-20,000 lb class and have accumulated over 20,000 hours of testing to date.

The Falcon 6X is equipped with an ultra-efficient wing that minimizes the impact of turbulence and a next generation digital flight control system that controls all moving surfaces, including a novel control surface called a flaperon. The 6X is the first business jet to use a flaperon, which considerably improves control during approach, especially on steep descents.

The aircraft also comes with industry leading noise suppression systems, based heavily on experience with the new Falcon 8X – the current benchmark in noise comfort – and an allnew cockpit and third generation EASy III all digital flight deck.

It will be delivered with a full package of equipment, including Dassault's FalconSphere II electronic flight bag and the revolutionary FalconEye Combined Vision System – the first head up display to combine enhanced and synthetic vision capabilities.

All Falcon 6X systems and critical equipment will be extensively validated on the ground through new Highly Accelerated Life Tests and Highly Accelerated Stress Screening endurance campaigns intended to enhance reliability and ensure that the aircraft is fully mature from the day of first delivery. "There is still today a strong market need for a brand new long range aircraft with a very large cabin. The Falcon 6X will be best value for money in the 5,000 nm segment, a class all its own," concluded Trappier. ■

P&WC's new PurePower PW812D engine application selected by Dassault Aviation to power the new Falcon 6X business jet

Ready to enter service, the PurePower PW800 offers the highest level of technology available on the market combined with the reliability of a proven core, sustainable technologies and a leading comprehensive service plan

Pratt & Whitney Canada announced today that a new variant of its ground-breaking PurePower PW800 turbofan engine has been selected to power the new Falcon 6X business jet, unveiled by Dassault Aviation. The PW812D engine, thrust 13,000-14,000 lbs, is set to offer exceptional performance, unparalleled reliability and sustainability. Ready to enter service on other aircraft, the PurePower PW800 engine is optimized for high-flying, fast, long-range business jets and shares the same proven, rigorously-tested core technology used in Pratt & Whitney's award-winning PurePower family of geared turbofan commercial engines. The advanced common core technology, employed in 16 different PurePower engine applications, has amassed more than 585,000 in-service hours.

"With the new Falcon 6X, our PurePower PW800 engine once again demonstrates its leadership in the long range business jet category," said Irene Makris, Vice-President, Marketing, Pratt & Whitney Canada. The PW812D offers the highest level of technology available, paired with the reliability provided by an award-winning platform. The PurePower PW800 engine incorporates the latest generation of technologies: delivering double-digit improvement in fuel efficiency, setting a new "green" engine standard for emissions with the advanced TALON X combustor, and its low-noise design and low vibration levels will result in an exceptionally quiet cabin, enabling a more comfortable passenger experience.

Thanks to its robust design, exceptional maintainability, and advanced diagnostics capabilities, the PurePower PW800 engine will deliver best-in-class availability and dispatch reliability to operators. This will be coupled with the PurePower PW800 family's enhanced service offering tailored for operator needs.

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