



# Falcons Fly Higher

*Professional pilots prefer the private jets of French fighter maker Dassault*

By Mark Huber

Photographs courtesy of Dassault Falcon Jet

**F**RANCE'S DASSAULT AVIATION—MAKER of the Falcon Jet line of corporate airplanes—is part of an \$11 billion-in-revenue, family-controlled group of businesses that take the long view of their company and industry. It leans heavily on seven decades of designing and manufacturing renowned military jet fighters such as the Mirage and Rafale. For this reason, Dassault's approach to the market is very different from its peers', resulting in brilliantly engineered planes that deliver superior fuel efficiency and sport the latest technology—and are seriously fun to fly.

Dassault specializes in medium- and long-range jets. More than 8,000 Dassault civil and military aircraft, including 2,300 Falcons, have taken to the air from the company's Bordeaux Merignac, France, headquarters since it opened in 1949. One key differentiator: Because Dassault's engineering and flight-test staff members work on both military and civil aircraft, they foster an open culture of collaboration and innovation, so you wind up with the best of both worlds.

It was Dassault that created Catia, the advanced 3-D software that has become the industrywide tool for designing aircraft. Dassault was also first to bring fully computerized flight controls to a business jet, while

mating advanced metal-alloy and bonding techniques to produce significantly lighter and more fuel-efficient airframes with larger cabins.

Meanwhile, optimized aerodynamics, including sophisticated wing designs, make it possible for Falcons to use shorter runways. Check out the YouTube video of a 70,000-pound Falcon 7X trijet landing in just 3,570 feet of mountainous runway in Gstaad, Switzerland, with plenty of room to spare. You can try this in any other comparable aircraft—exactly once.

## John and Martha King

operate one of the most successful flight-training schools in the world and own a 1974 Falcon 10. “Any pilot who has flown the Falcon 10 will tell you that it is their favorite airplane,” says John.

“It is fast and performs well, and it is hard to fly the airplane without giggling.” That's pretty much the way every Falcon pilot and owner I've talked to over the past 20 years describes the plane.

This cachet, welded to the brand's technical prowess, is why Falcon jets have better resale value than their contemporaries, according to the aircraft-pricing service Vref, which compared the 10-year-old Falcon 900EX with the

Gulfstream G450 and Bombardier Global 5000.

Dassault Aviation is actually a publicly listed stock (as is the family's software firm, Dassault Systems). The aviation unit's stock price has soared steadily from 126 euros (\$148) per share in 1999 to nearly €1,100 by December 2014, which in turn has made the controlling Dassault family members very rich.

Count on it: The family is not about to change its winning formula, as seen in the two newest Falcons, the under-development 8X ultralong-range trijet and the recently unveiled 5X long-range twinjet.

The 8X is a stretched, refreshed, and longer-range version of the firm's wildly popular \$53 million 7X, which debuted in 2005 and has since sold more than 250 units worldwide. The extra 3.5-foot length of the 8X's fuselage allows for a shower in the aft master suite, stretching the main cabin to 42 feet, 8 inches long.

With eight passengers and three crew (two pilots, one attendant), the 8X has a maximum range of 7,422 statute miles, allowing it to fly from Beijing to New York nonstop. The first 8X rolled out of the hangar on Dec. 17, 2014, with its first flight expected in early 2015 and customer deliveries starting in 2016.

Dassault is on a tear. In October 2013, it unveiled the 5X, its new large-cabin twinjet. The first of these aircraft will fly in 2015, and U.S. Federal Aviation Administration certifica-

THE FALCON 5X:  
FIGHTER-JET TECH-  
NOLOGY FUSED TO  
LUXURY WINGS.

tion will probably occur in 2017. The \$45 million 5X features a much larger fuselage diameter than past models—even wider than that of the company's current 7X flagship—with the new tube yielding 78 inches of headroom, for an overall cabin volume of 1,766 cubic feet. It is widely expected to be the template for Dassault's follow-on models. Available cabin configurations include seating for 12 passengers.

Dassault claims the 5X aircraft will be 50% more fuel efficient and cost 30% less to operate than competing large-cabin models from other manufacturers. The 5X will feature everything from a computer-driven, fiber-optic control system to an expansive cockpit with large windows.

Pilots will be thrilled by the digital avionics, which are based on the Honeywell EASy system. Essentially, a clear visor folds down in front of the window and displays flight data. It



Above, the clean and sophisticated cockpit of the \$45 million Falcon 5X, with flight data appearing on a clear, drop-down visor; and, right, the airplane's extra-wide interior, yielding 78 inches in headroom.

will include a new feature that takes data from a GPS terrain-mapping system and enhanced vision information from a nose-mounted infrared camera, and gets them to work together to allow landings in the absolute worst



visibility conditions.

The 5X will have a maximum range of 5,980 statute miles, which will take you from Los Angeles to London at a top speed of Mach 0.9, or nearly 600 miles per hour, at cruising altitude. The jet also boasts longer intervals between maintenance than previous Falcons.

In addition, the 5X has an all-new wing that incorporates a fresh tip design and adds weight-saving flaperons, which make for better flight control. That's another fighter-jet feature that is getting its first application on a corporate jet.

Which reminds us why Falcons are a different breed of biz jet. *Vive la différence!* ■

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