



DASSAULT FALCON 900B BY MARK HUBER

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Big cabin, great short-runway performance and long legs. This has been the winning formula for **Dassault's Falcon 900** series for nearly 30 years through multiple upgraded iterations, the latest of which is the \$43.3 million 900LX. The Falcon 900's trijet design lets you get into and out of airports you wouldn't dare try to use in a comparable twinjet, especially on hot days. Its intelligent, strategically applied combination of fuselage materials—including Kevlar, carbon fiber and titanium—yields a strong tube that weighs thousands, in some cases tens of thousands, of pounds less than other twinjets in its class, thereby delivering superior fuel economy.

Aside from minor changes in engine thrust, newer avionics, digital cabin-entertainment systems and a few hundred miles of additional range, the new 900 you can buy today is pretty much the same as the originals that rolled off the production line in the late 1980s. Thanks to advanced computerized design and engineering optimization, the 900 was way ahead of its time then and remains relevant today. Dassault also builds fighter jets and some of the thinking behind those found its way onto the 900. One result is its crisp, precise handling, which is a pilot pleaser. Consequently, Dassault has produced more than 500 of the series 900 Falcons since 1986 and they hold their value well (see chart on page 54).

Granted, older aircraft in general require more maintenance and you may spend heavily at first to refurbish them. Unless you're willing to live with mediocre dispatch reliability, some older airplanes

simply make no sense. But the Falcon 900 does. You can pick up a 1999 Falcon 900B for \$9 million, fit it with winglets, new interiors and avionics upgrades, and have a really nice airplane for \$12 million to \$13 million.

Older 900Bs sell for even less. The aircraft valuation service Vref reports that some are going for as little as \$5.75 million, and a few 900As that were given the engine upgrade to a B are priced lower still.

Production of the B model began in 1991 and ended in 1999. Compared with the original 900, it features upgraded Honeywell TFE731-5BR-1C engines that deliver an extra 250 pounds of thrust each, increasing the 900B's range to 4,000 nautical miles. Compared with the 900A, the beefier engines add 5.5 percent more thrust on takeoff; cut time to climb to 39,000 feet at maximum takeoff weight from 29 to 26 minutes; and goose the speed an extra 2 percent at cruise altitude.

You can better those metrics with blended winglets from Aviation Partners, which cost approximately \$750,000. The winglets take about four weeks to install but increase range up to 5 percent at high-speed cruise and 7 percent at long-range-cruise speeds. They also facilitate a faster climb to altitude, so you burn less fuel in the process. And winglets have another attribute: they look cool and will turn even an old 900 into major-league ramp candy. Authorized installers include Duncan Aviation, Hawker Pacific Asia, Midcoast Aviation, Standard Aero, TAG Aviation and West Star Aviation.

The 900's 1,264-cubic-foot, 33-foot-long, flat-floor cabin is still one of the best ever designed for all-around utility. Though not perfect, it is comfy. It's pressurized to maintain a sea-level cabin to 25,000 feet and that's great for beating back jet lag.

A traditional cabin layout features a galley opposite the main entry, a small forward closet, a forward club-four grouping of larger executive seats bifurcated with folding sidewall tables, then four narrower seats arrayed around a hi-lo conference table across the aisle from a credenza/entertainment center. Aft of that through an optional pocket door is a three-place, side-facing divan with berthing top that converts into a bed across the aisle from an executive workstation. Behind that is the lavatory with another small wardrobe closet and through the lavatory passengers can access the heated 127-cubic-foot baggage compartment in flight. The external baggage door incorporates a step for easy loading.

Natural lighting comes from 24 windows. My only criticisms of the cabin concern the smallish size of those windows and the height of the seat bases, which are a little short for taller folks.

Otherwise, it is airy, light and elegant. Depending on the cabin layout you select, you can accommodate 11 to 14 passengers plus three crewmembers. If you plan on using the aft of the aircraft as a private stateroom, make sure the used 900 you select is equipped with the optional second lavatory in the forward fuselage. You'll appreciate the lack of interruptions and your crew and other passengers will value the convenience.

Few 900 owners fly them at full passenger capacity. If you don't plan to do so, you can make your aircraft more comfortable with a few basic layout changes. If you opt to gut the interior, consider an enlarged forward self-serve galley followed by eight single executive seats in the main cabin, and an electrically reclining three-place divan that folds down into a bed opposite an entertainment credenza with large pop-up flat-screen monitor in the stateroom. This layout provides sleeping areas for five.

New single executive seats, available for retrofit, have optional footrests and can be reclined to lie-flat, full-berthing positions. However, if you absolutely must have a conference table and seat grouping, you'll be glad to know that the 900's fuselage is wide enough to accommodate it and the two seats on either side (for a total of four) plus two more seats across the aisle at the end of the table. That effectively gives you table seating for six, a rarity on business jets. This is a popular option on the Falcon 2000, the 900's smaller twinjet cousin, which shares its 92-inch-wide cabin (from centerline).

Acoustic-blanket sound dampening also has come a long way since 1989, and installing it will significantly reduce cabin noise, by three to seven decibels in flight. Retrofitting adjustable color/intensity LED lighting is another effective means of cutting passenger fatigue.

Maintaining any Falcon is pretty much a labor of love with generally higher requirements for mundane things like routine lubrications. However, the engines don't have a recommended time between overhauls and can be maintained "on condition," just like the engines on most airliners. This doesn't mean they're maintenance free. Inspections must be performed at regular intervals and you'd be wise to enroll the engines in Honeywell's MSP hourly maintenance plan.

In the past, the downside with Dassault was that while it made great airplanes, it didn't have the product support to match. Those days are over. Dassault noted last year that it had a 98.5 percent parts-availability rate—meaning that customers nearly always receive parts on the day they're needed—and that most parts ship within 30 to 60 minutes of order placement. The French manufacturer's customer-support program now uses two company-owned Falcon 900s as rapid-response aircraft, one based at Teterboro in New Jersey and the other at Le Bourget in France. The Falcons will be used to transport Dassault Go Teams of technicians, parts and tools and, if necessary, transport customers to their destinations, while their aircraft are being serviced.

This first-class product support should help keep the Falcon 900B popular for years to come. If you're looking for a large-cabin jet that does virtually everything well, this could be the airplane for you.

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