

# BARRON'S Special Report

## CORPORATE JETS

How to Get Yourself Aloft, page S3  
Six of the Hottest Models, page S9



# CORPORATE JETS: BUY OR RENT?

You can charter a plane for a single flight or buy a \$50 million airship. Either way, you'll never again want to fly commercial.

# CERTAINLY, PRIVATE JETS MAKE A STATEMENT. OURS SAY, "I'VE GOT WORK TO DO."

And, equally importantly, they do not say, "I'm a well-heeled jet-setter who spends money frivolously." This is not a subtle distinction—it's a profoundly different point of view.

The truth is that for many individuals and corporations, a jet makes sound business sense. Of course, when compared against commercial first-class seats, the price is higher. But for individuals whose time is valuable, there are other costs to consider: inflexible schedules, time spent driving to major airports, getting through security, waiting to board and sitting on the tarmac. And that's when everything goes smoothly—which, according to the FAA, is only about 70% of the time. Now add these lost hours to the price of your airline ticket to get a true assessment of the cost difference.

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**FLEXJET**  
BY BOMBARDIER

**SPECIAL REPORT: Corporate Jets**

Even as the economy stumbles, private aviation is soaring. What's the best flight path: buy or rent?

# Your Jet Is Ready

by Jeff Burger

**W**hen Warren Buffett changed the name of Berkshire Hathaway's corporate jet from "The Indefensible" to "The Indispensable" in the mid-1990s, he was only a few years ahead of the rest of the business world. • Today, even as the economy falters, more and more corporations and high-net-worth individuals are flocking to private aviation. Shipments of new business jets jumped 28% last year, to 1,138 aircraft. And Berkshire's own flight-services division, which include fractional-share provider NetJets and an aviation-training company—posted a 49% jump in pretax earnings, to a record \$547 million. • It's no mystery why private flying is so popular. With your own jet, you can wave good-bye to long security lines, lost-luggage worries, frequent de-

This report is a collaboration between *Barron's* and *Business Jet Traveler*, a bimonthly magazine. The stories were prepared by staff members of *Business Jet Traveler* and edited by *Barron's*.

**BUSINESS JET  
TRAVELER**



The allure of business-jet travel is clear. How to arrange it isn't.

## Some companies are starting to offer air-taxi services on small, very light jets at prices that rival what you'd pay in business class on the airlines. One Florida-based outfit has concocted a pricing scheme that allows it to target \$80,000- to-\$100,000-a-year middle managers.

lays, and all the other hassles that go with commercial flights.

But after you've made the easy decision to fly on a private airline comes the tough one: Exactly how do you want to do it? Options abound, and attached to some of them you'll find long lists of pros and cons. Let's take a look at some of the most popular choices.

### Chartering

A Good Way to Start

If you've never set foot on a business jet, this is the best way to get acquainted with the service. Charters give you some of the most important advantages of business jet travel, including freedom from airline schedules, bypassing crowded terminals and a more luxurious ride. Plus, you may be able to land much closer to your destination than you could if you flew on a commercial airline.

None of this comes cheap. Hourly rates recently ranged from \$1,240 for a King Air 200 twin-turboprop, to \$2,078 for a six- to eight-passenger Learjet 35A to \$4,531 for a large and speedy Gulfstream III, according to the Air Charter Guide. (Those prices are for one-way flights, and don't include aircraft-positioning charges, fuel surcharges and other possible expenses, such as catering and airport-landing and ramp fees.)

Still, when you consider all the costs, a charter is typically less expensive than any other private-jet option. And it has virtually no strings attached: You pay your money, you take your flight and you walk away.

So why would anyone opt for more expensive alternatives?

Partly because, just as you have no ongoing commitment to a charter operator, it has no ongoing commitment to you.

You can't count on flying on a particular aircraft or model or with a particular crew. And you'll need to do your homework every time you use a

new charter company, to make sure it has the proper certification (known as "Part 135") from the Federal Aviation Administration, is adequately insured and has passed audits from one or both of the leading business-jet safety firms, Avi-

ation Research Group/US and Wyvern Consulting.

Keep in mind that booking an airplane when you need one is just one of several ways to go about chartering these days. There's also block charter, where you save a bit on a per-flight basis by contracting in advance for as-yet-unscheduled trips. In addition, there's per-seat charter, where you buy a seat on a business jet's scheduled flight rather than pay for the whole airplane. (Federal aviation rules place restrictions on this type

of arrangement, so it is rare.)

you generally fly at least 25 to 50 hours a year, but less than about 200 hours. Like block-charter deals, jet cards commit you to a certain amount of flying, and you pay a big lump sum up front. The major differences between block charters and jet cards are that block-charter deals are usually custom-tailored to the individual, while jet cards are more openly marketed, often have more restrictions, and are likely more expensive on a per-hour basis.

The reason for this is the highly per-

ever, have begun offering fewer hours for less money—typically 10 hours on a light jet for a bit less than \$50,000.)

As you fly, the provider deducts the costs of your flights from the amount you have on deposit, just as if it were a gift card. Jet cards give you more consistency than ad hoc charters, as you're generally guaranteed a particular aircraft model. And most companies let you upgrade or downgrade from the model you've contracted for on a per-flight basis.

While providers tout the simplicity of

### Five Ways to Fly

In picking the best way to get into private aviation, you should consider how much you'll be flying and how much control you'd like to exert. The options range from basic one-time chartering to full ownership of state-of-the-art jets. Here's a rundown of the choices and the costs.

Option	Sources	Typical Usage	Costs	User Has Operational Control?
<b>Traditional Charter</b>	Numerous.	Occasional.	Hourly rates: about \$1,200 to \$4,500, depending on jet.	No.
<b>Block Charter</b>	Executive Jet Management, Jet Aviation, PrivateAir, etc.	Up to about 25 hours per year.	Hourly rates: somewhat less than for traditional charter.	No.
<b>Jet Cards</b>	Sentient, Delta AirElite Marquis Jet, etc. and in conjunction with some fractional operations.	25-50 hours per year.	For 25 hours of flying: about \$100,000 to \$150,000, depending on jet.	No.
<b>Fractional Ownership</b>	NetJets, Flight Options, Citation Shares, Flexjet.	50-300 hours per year.	A one-sixteenth share, good for 50 hours of flying: about \$420,000 and up, plus monthly costs.	Yes.
<b>Whole Ownership</b>	Aircraft manufacturers and brokers.	300+ hours per year.	About \$3 million-\$40 million, plus monthly costs.	Yes.

Source: Business Jet Traveler

of arrangement, so it is rare.)

Finally, some companies are starting to offer air-taxi services on the new very-light jets at prices that rival what you'd pay in business class on the airlines. Florida-based DayJet, which has a fleet of the very-light jets, has concocted a pricing scheme that allows it to target \$80,000- to \$100,000-a-year middle managers. A flight from Boca Raton to Lakeland, Fla., for example, can cost as little as about \$275, but the price can be considerably higher, depending on how flexible you are about departure and arrival times.

### Jet Cards

A Step Up

Jet cards, a popular and fairly recent innovation, are the next step up from chartering. They're worth considering if

sonalized nature of the block charter.

Many travelers have specific and recurring travel requirements. For example, if you need to fly from Albany to Pittsburgh on the fourth Monday of every month for a business meeting, want to fly to Belize four times a year to get to your second home and need to make six to 10 other business and personal trips every year, you can negotiate very favorable terms with a charter operator who can count on and plan for these trips. Jet cards are not nearly as specific, and the uncertainty for the operator is reflected in the higher per-hour rate charged the user.

For example, for a 25-hour card, you'll pay \$140,700 to \$169,900 to Flexjet for a Learjet 45; and \$126,900 to Marquis for a Citation V Ultra. (Some operators, how-

jet cards, they are in reality both complex and varied. Some companies have their own fleets, for example, while others book time with air-charter operators or fractional outfits. Some charge your account for positioning or "empty-leg" flights. These are the flights without passengers that are necessary to deliver the jet to where you need it or to return it to its base after your one-way trip.

Some of the companies pay interest on your account balance, allow you to apply a remaining balance to a fractional or full-aircraft purchase or refund unused amounts; with others, you simply lose any unspent funds.

Clearly, you need to do your homework and aim a magnifying glass at the fine print that details these important distinctions.

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*The publisher reserves the right to reject any non-qualified applications.*

Jet cards are a popular and fairly recent innovation, and the next step up from chartering a jet. The provider deducts the costs of your flights from the amount you have on deposit—just like a gift card.

### Fractional Shares

Owning a Slice

NetJets popularized the fractional ownership concept in the early 1990s. Today, about 5,000 individuals and companies in the U.S. own aircraft shares.

The appeal of such shares is that they provide many of the pluses of owning your own jet, but at much less cost and with far fewer responsibilities. Fractional owners pay an acquisition fee for their shares, but like full owners, they may be able to deduct depreciation. Plus, they can resell their shares to the fractional provider, usually after five years, and walk away.

The typical minimum share is one-eighth, which is considered equal to 100 hours of flying time, although some companies offer one-sixteenth and even one-thirty-second shares. At NetJets, a one-sixteenth share, good for 50 hours, starts at around \$417,000 for a Hawker 400XP. (Keep in mind that most programs add 12 minutes to the length of each trip to cover the expense of takeoffs and landings.) You'll also owe a monthly management fee and an hourly operational fee.

Note that while your share buys you part of a particular aircraft, you may never fly on it; what you're really buying is the right to fly any airplane of that model in the program's fleet. The good news is that you can also generally upgrade or downgrade to larger or smaller models as necessary. (You'll simply be charged more or less than an hour of flight time for each hour you use, depending on the model.) You can even use two airplanes at once, although you'll of course be charged accordingly.

In addition to flexibility, fractional flying offers consistency of service—you're dealing with one operator, not a variety of charter companies—and you don't pay directly or as much for moving the aircraft to or from where you need it, as you do with charter.

And unlike full owners, you don't have to worry about employing a flight department or management company. Nor do you have to go looking for a buyer, since the management company will buy back your share according to terms in your contract.

So what's not to like? Well, while frac-

tional flying offers flexibility, it's no match in that regard for full ownership: There are still advance-booking rules, late fees if you don't show up on time, and peak travel days that require extra notice. Plus, a fractional share can prove expensive indeed if you pay for more flight hours than you wind up using.

Last but far from least, while the initial and recurring costs of a share are relatively fixed, the buyback price at the end of your contract is anything but. You could be hurt by declining values and also by the way some programs calculate those values. They generally attempt to buy shares back at a discount from current market value; may base current value on wholesale prices rather than retail; may overly reduce their offers based on how much the jet has been flown; and may not adequately account for upgrades to the aircraft. In recent years, many owners have lost significant parts of their investments at resale.

Still, fractional shares are the best solution for some passengers—particularly for many of those who fly between 50 and 300 hours a year.

Four companies dominate the fractional business. The oldest and by far the largest is the aforementioned NetJets, which has been in the business since 1986 and which also offers shares via NetJets Europe. The second-largest player is Flight Options, which operates out of Cleveland and which Raytheon recently sold to H.I.G. Capital, a Miami-based private-equity firm.

Other major fractional operators include Greenwich, Conn.-based Citation-Shares, which focuses on light and mid-size aircraft and is a division of Cessna Aircraft; and Flexjet, a Texas company owned by Canadian aircraft manufacturer Bombardier.

### Whole Ownership

Freedom and Responsibility

For those who fly privately on a regular basis, there's nothing like whole ownership of an aircraft. The good news is that you're in control of everything: You can go when you want to go, pick your own pilots and outfit the interior as you choose. But that's the bad news, too:

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## The whole point of flying privately is to gain control—of your time, your surroundings and your itinerary. And there's no match for strolling up to your jet and instructing your pilot to take off.

It's your responsibility to hire and oversee a flight department, and you're on the hook for maintenance, insurance, repairs and many responsibilities that others can leave in the hands of a charter, jet-card or fractional-ownership outfit.

Still, the whole point of flying privately is to gain control—of your time, your surroundings and your itinerary. And when it comes to gaining control, charters, jet cards and fractional shares are simply no match for strolling up to your own jet and instructing your own pilot to take off.

One way to alleviate some of the hassles of ownership is to partner with someone else. Another way is to hire a management company to operate your airplane for you. Many, if not most, such companies are also charter operators and will gladly charter your aircraft to others if you want.

In fact, most charter airplanes are not owned by the charter operator but by individual or company owners. Chartering your airplane will place limits on its availability to you, but will offset some of the cost of ownership.

Not surprisingly, that cost is substantial. Even a fairly small new turboprop, like Socata's TBM 850, will set you back nearly \$3 million, while Bombardier's seven-to-nine-passenger Learjet 60XR carries a price tag of around \$13.5 million and Dassault's Falcon 7X costs in the neighborhood of \$40 million.

And those numbers are just the beginning of the payouts: You'll also face fixed annual costs for maintenance, insurance, hangar space and myriad other expenses—typically more than \$360,000 in total for a Citation V to more than \$680,000 for a Gulfstream GIV-SP, according to the consulting firm Conklin & de Decker. And then there are the hourly operating costs—about \$1,980 for the Citation V and \$4,195 for the Gulfstream GIV-SP, according to Conklin & de Decker.

Becoming a full owner can also be complicated. While fractional buyers generally choose from a handful of operators and then from a handful of models at set prices, buyers of whole aircraft face a field of thousands of new and used models at a wide variety of prices.

And those prices aren't always what you'd expect: For example, a used aircraft can cost more than a new version of the same jet, because buyers of the latter may have to wait several years for delivery and the market puts a premium on immediate availability.

Deciding whether to buy new or used and picking an appropriate model is just the start. You'll have to negotiate the deal and take into account such factors as how long the aircraft has been for sale and whether required inspections are coming due. You'll have to seek financing proposals and arrange for the airplane to be inspected and managed. And you'll have to consider the tax factors.

For example, if your new aircraft will replace a fully depreciated old one, you might be able to avoid federal tax by employing an Internal Revenue Code Section 1031 Like-Kind Exchange. This effectively lets you avoid paying depreciation recapture at ordinary income rates on the sale; instead, your unrecognized gain is transferred to the basis of the aircraft you're buying.

Do you have the time and expertise to navigate all these murky waters? Probably not—which is why you would most likely benefit from hiring an aircraft broker or consultant. These professionals are available to assist not only with whole-aircraft purchases, but also in helping any private-jet traveler develop a solution that best suits his or her needs.

In the end, no form of private aviation is as easy and cheap as buying a commercial airline ticket. So is it really worth hiring consultants, spending all this money and making all these decisions just to fly privately?

If you're asking that question, you probably haven't yet ridden on a business jet. As political consultant James Carville recently told this reporter, "If I had to fly commercial and could stay in the suite in the top of a hotel, or take a private plane and stay in just a room, I'd say, 'Give me the plane.' Once you have dipped the sweet nectar of freedom, you don't go back." ■

JEFF BURGER is executive editor of Business Jet Traveler.



**SPECIAL REPORT: Corporate Jets**

Today, there's a jet for every corporate itinerary and market cap. Here are six of the hottest—prices run from about \$3 million to \$50 million.

# Flying the New Business Class

by R. Randall Padfield



Despite the props, the Hawker Beechcraft King Air C90GTi is jet-powered and a good choice for short hauls.

The sky is full of business-aircraft models and their derivatives—literally in hundreds of shapes and with at least that many varied capabilities. So how do you start to make sense of them all?

To most people—whose frame of reference is airliners—business jets are just small airplanes. Take the eight-to-19-seat Bombardier Challenger 601, considered a large business jet. To create the 50-seat Canadair Regional Jet used by commercial airlines, Bombardier stretched the 601's fuselage by 19 feet. Even so, compared with a Boeing 747 or Airbus A380, the regional jets are tiny—and the Challenger is even tinier.

The six airplanes reviewed here represent the categories (based on engine type—turboprop or jet—and cabin size) that together serve most pri-

vate and business aviation travelers. There's no single, widely accepted standard for grouping business aircraft. Like a gerrymandering politician, each manufacturer defines the categories in a way that best reflects on its own products.

We like to organize them by cabin volume for two reasons.

First, while airline passengers might spend more time in airports than flying, business aircraft passengers spend most of their travel time in the cabin. And because business aircraft vary so much in cabin size, buyers often make that feature their most important consideration.

Second, cabin size affects other factors that define an aircraft's design and performance. Among them: the wings, engines, weight, speed, range, ac-

quisition price and operating costs. No single aircraft can fulfill all missions, so each is a compromise.

For instance, a larger cabin makes the aircraft heavier; a heavier aircraft requires more powerful engines, more powerful engines burn more fuel and so on. Other consequences: higher prices and operating costs. But there are benefits, such as increased flying range, to large-cabin aircraft. It's not easy to design a small-cabin airplane that can make a transcontinental flight without stopping to refuel.

Obviously, these six are but a few of the many new and used business-aircraft models available to rent via charter and prepaid jet card (similar to a retail gift card) or to buy—either in part or whole. (Not included are the “bookends” of these categories: the very small personal and light jets, like the Eclipse 500, and the very large business jets, or “bizliners,” like the Boeing Business Jet and Airbus ACJ, which are based on commercial airliners. These latter two are worthy topics, but our space is limited and their growing market niches are still a small fraction of the more than 27,000 business aircraft operating worldwide, according to Jetnet AvData of Utica, N.Y. And we haven't even mentioned helicopters.)

A word about numbers. Like EPA auto-fuel economy estimates, the numbers you'll find about aircraft in brochures rarely correlate exactly with real-life performance. While aircraft must conform to stringent FAA-certification standards, most performance figures aren't certified. Therefore, an airplane's actual range, speed and climb rate, among other measures, will vary based on weather, mandated procedures, piloting skill, maintenance and the specific aircraft. Prices listed are for 2008 deliveries of new aircraft.

## Hawker Beechcraft King Air C90GTi

**Category:** Twin Turboprop

Jets may be all the rage these days, but jet-powered—or more properly, turbine-powered propeller-driven—airplanes are often a better choice. These turboprops come with one or two engines and run on the same fuel that powers jet

airplanes. By far the most popular twin turboprop series is the Beech King Air, continuously updated since it went into production in 1964. Some 7,000 King Airs of all types have been delivered, more than 2,500 of them King Air 90s, including one that Lyndon Johnson used while president.

Cessna targeted its first jet, the Citation (model 500), at King Air's market, but made only a small dent. The very-light-jet (known as VLJ) manufacturers are doing the same now, and Hawker Beechcraft is fighting back with upgraded features.

The current King Air 90 production model, the C90GTI, features a pressurized cabin that is up to 50% larger than that of the smaller VLJs, a heated baggage compartment, which is accessible in flight, and a private aft lavatory. The top-line cockpit is designed for easy operation by one pilot, but can just as easily be flown by a two-pilot crew. The ability to take off and land on unpaved runways has always been one of the King Air's strong points.

The C90's cabin (volume, 227 cubic ft.; length, 12 ft. 7 in.; height, 4 ft. 9 in.; width, 4 ft. 6 in.) seats up to 12 passengers. Its maximum cruising speed is 270 knots, slower than the jets. But on short trips, this can mean only minutes' difference. Its maximum range is about 1,300 nautical miles and certified ceiling is 30,000 feet. Price: about \$3.2 million.

### Cessna Citation CJ3

**Category:** Small/Light Jet

After certifying its first business jet, the Citation 500, in 1971, Cessna introduced several follow-on models (Citation I, II, III and V) of increasing size and performance. Then, in the late 1980s, it went back to the drawing board to design another "entry-level business jet" that would have more speed and range than the original. The result was the CitationJet, later dubbed the CJ1 as Cessna added upgraded derivative models designated the CJ1+, CJ2, CJ2+, CJ3 and CJ4 (you can see here just how dizzyingly full the skies are). Cessna today is the most prolific business-jet builder, and so adept at developing and certifying airplanes that you can set your calendar by the promised delivery dates of its new models.

Success begets success, they say, and so it is with the CitationJets. Some 1,185 had been delivered by April. Currently in production are the CJ1+, CJ2+ and CJ3. The CJ4 is under development, with an ex-



The Cessna CJ3 emerges from "entry-level" jet program.



The Bombardier Learjet 45XR2 bears storied brand name.



Cessna Citation X: the world's fastest business jet.

pected first flight in the second half of this year and initial deliveries slated for the first half of 2010.

The CJ3's cabin (260 cubic ft.; length, 15 ft. 8 in.; height, 4 ft. 9 in.; width, 4 ft. 10 in.) seats six passengers. Its maximum cruising speed is 417 knots, its maximum range is about 1,900 nautical miles and the certified ceiling is 45,000 feet. Price: about \$7.5 million.

### Bombardier Learjet 45

**Category:** Midsized Jet

In the minds of most folks, Learjet is synonymous with the small business jet in the same way that every small, high-wing, single-piston prop plane is a Piper Cub. I imagine business schools

discuss Learjet's product branding—at least those near Wichita, Kan., where Cessna, Hawker Beechcraft and Learjet are all based.

Contrary to popular belief, however, the business-jet era in the U.S. actually began not with the delivery of the first Lear 23 in 1964, but in 1958, when Timken Roller Bearing of Canton, Ohio, took delivery of a four-seat Morane-Saulnier MS 760 Paris jet, a French military trainer. (Propeller-driven business aviation took wing after Charles Lindbergh's solo trans-Atlantic flight in 1927.) Two U.S.-built military transport jets, the North American Sabreliner and Lockheed JetStar, also entered service before Bill Lear's baby was certified.

Nevertheless, the Lear 23 and later Learjets, which had their roots in a Swiss fighter plane's design, quickly supplanted these business jets in the general public's imagination.

The company, however, struggled through several owners, for a time in the 1980s stamping out aluminum pans for Pizza Hut to meet payroll. Finally, in 1990, it found a home in Canada's Bombardier group. Two years later, the company announced that it was developing the Learjet 45, the first all-new Learjet since the model 23. After much delay, the 45 obtained FAA certification in 1997. The upgraded Learjet 45XR, introduced in 2004, provides better performance. Bombardier has delivered more than 355 Learjet 45/45XRs.

Larger than the Learjet 31 and smaller than the 60, the 45 is one of five Bombardier models offered by Flexjet, the manufacturer's fractional operator. The others include the Learjet 40 and 60 and Challenger 300 and 604. Bombardier derived the Learjet 40 from the 45 by shortening the fuselage by two feet. It entered service in 2003.

The Learjet 45's cabin (volume, 410 cubic ft.; length, 19 ft. 9 in., height, 4 ft. 11 in.; width, 5 ft. 1 in.) seats up to nine passengers, including one on the certified lavatory seat. Its maximum cruising speed is 465 knots, its maximum range is about 2,000 nautical miles and its certified ceiling is 51,000 feet. Price: about \$12 million.

### Cessna Citation X

**Category:** Super-Midsized

Speed sells. The Mach 0.92 Citation X (Ten), the fastest business jet since 1996, obtained the additional distinction of being the fastest civil airplane flying in 2003, when the supersonic, Mach 2 Concorde was retired. (Mach 1, the speed of sound, is roughly 600 nautical miles, or knots, per hour, or about 690 miles per hour—varying with temperature and altitude.) If the recently announced Gulfstream 650 lives up to its promise of a Mach 0.925 top speed, it will beat the X by roughly three knots. But that won't happen until the G650 enters service in 2012.

Cessna has delivered 283 Citation Xs, proof of its sales power. This impressed Paul Touw, founder of private-jet company XOJet, so much that he has 15 in operation and has ordered 30 more, for resale to fractional customers and for charter.

But speed also costs, and the X's cabin is smaller than those of the other super-midsized jets; the exception is the Citation Sovereign, a derivative of the X whose cabin has the same cross-section but is shorter. In comparison, the cabin of the Hawker Beechcraft 4000, another super-midsized jet, is 36% larger by volume than the Citation X's. "But you get there faster," says a devotee, "so the smaller cabin is bothersome for a shorter time."

The Citation X's cabin (volume, 633 cubic ft.; length, 29 ft. 5 in.; height, 5 ft. 8 in.; width, 5 ft. 6 in.) seats eight to 12 passengers. In addition to the max speed of Mach 0.92, its maximum range is about 3,200 nautical miles and its certified ceiling is 51,000 feet. Price: about \$20.7 million.

### Dassault Falcon 900EX

**Category:** Large Jet

If you see a business jet with three engines, you can be sure it's a Falcon. You'll have to find other visual clues to distinguish Falcon's two-engine models from their rivals.

Dassault was one of the first to market a business jet, the twin-engine Mystère 20 (renamed the Falcon 20 for the U.S. market), certifying it in 1965. The popular Falcon 50, certified in 1976, was the first trijet. The next was the large-cabin Falcon 900, certified in 1986. Derivatives of the 900 are the 900B, 900C, 900D, 900DX and 900EX, the current production model. More than 400 have been delivered.

Business-jet owners are typically brand loyalists, but Falcon owners are particularly steadfast. Certainly, the roomy Falcon cabins—always sophisticated, never flashy—are a big reason for this. And Das-

sault's long heritage in combat aircraft gives it a technology edge over the other business-aircraft manufacturers. For example, the new Falcon 7X is the first business jet with fly-by-wire flight controls. (In these systems, the pilot controls the plane via electronics and computers rather than physically handling mechanical controls.)

The Falcon 900EX's cabin (volume, 1,264 cubic ft.; length, 33 ft. 2 in.; height, 6 ft. 2 in.; width, 7 ft. 8 in.) seats eight to 19 passengers. Its maximum cruising speed is Mach 0.87, its maximum range is about 4,500 nautical miles and its certified ceiling is 51,000 feet. Price: about \$39 million.

**Gulfstream GV500/550**

**Category:** Large/Ultra-long-range

If all small business jets are Learjets, then all big business jets are Gulfstreams. That's not true, of course. You also have Challengers, Falcons, Bombardier Global Expresses (or just Globals) and Legacies, from Brazil's Embraer. But thanks to many factors, some impor-



Dassault Falcon 900EX: distinctive three-jet design.



Gulfstream G550 brings New York and Tokyo a little closer.

tant (performance, product support) and others more trivial (celebrity users, popularity), Gulfstreams are the "it" jets to many.

The product line began with a twin turboprop, the Grumman Gulfstream I, which was built on Long Island and certified in 1959. The GI evolved into a twinjet, the GII, in 1967. Using the GII's basic design and type certificate, Gulfstream derived the GIIB, GIII, GIV, GIV-SP, GV and GV-SP. A rebranding in 2002, which included some equipment upgrades, resulted in the G300, G350, G400, G450, G500 and G550. The GV, GV-SP, G500 and G550—the largest of the Gulfstreams—have the same cabin size, and from a passenger's perspective, are difficult to tell apart. Acceptance of the new designations has taken time, and many people still refer to G500s and G550s as GVs. In service are some 360 of the GV500/550 series.

What makes the model special are its cabin size and its range, which is almost 6,750 nautical miles at the G550's long-range cruising

speed of Mach 0.80. The G550 can cruise faster, but range is the trade-off, as it is with every aircraft. At its high cruising speed of Mach 0.87, range drops to 5,000 nautical miles—not at all shabby, but it won't take you from New York to Tokyo like long-range cruising speed can. At the normal cruising speed of Mach 0.85, you'll go 6,000 nautical miles.

As sexy as these range figures are, Gulfstream found that most GV owners rarely flew the really long trips. What they liked most about the aircraft was its cabin. So the company reduced the fuel capacity of the G550 to create the G500. The range numbers decreased (max range is 5,800 nautical miles), but all else stayed the same.

The Gulfstream GV500/550's cabin (volume, 1,669 cubic ft.; length, 50 ft. 1 in.; height, 6 ft. 2 in.; width, 7 ft. 4 in.) seats 14 to 19 passengers. Aside from its maximum cruising speed of Mach 0.87, the maximum range is roughly 6,750 nautical miles and its certified ceiling is 51,000 feet. Price: about \$47.6 million. ■

R. RANDALL PADFIELD is editor in chief of Business Jet Traveler and its sister publication, Aviation International News.



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