



Business Airplanes

Revenues and deliveries soared last year; more new models introduced.

By Fred George

General aviation aircraft manufacturers set a billings record in 2005, topping \$15 billion for the first time and soaring more than 27 percent compared to 2004, according to GAMA. Unit deliveries jumped more than 20 percent in 2005 vs. the previous year, reaching 3,580 aircraft. In a prime sign of the industry's health and strength, 2005 piston-engine aircraft shipments were up by one-fifth over 2004. Cessna single-engine airplane sales surged in large part because of market enthusiasm for aircraft equipped with Garmin G1000 glass cockpit avionics. Cirrus and Columbia (nee Lancair) sales jumped, as well, with Piper, Raytheon and Mooney also showing impressive gains. Virtually all of the hot sellers are equipped with large-format LCD glass cockpits. It's tough to find new general aviation aircraft from major manufacturers that still have steam gauges.

Mooney, not content to rest on last year's success, introduced the M20TN Acclaim at Sun 'n Fun this year. The Acclaim will replace the 16-year-old TLS Bravo in the product lineup. Fitted with a 280-hp, twin turbo-normalized Continental TSIO-550-G, the Acclaim should be able to cruise at 230 KTAS at FL 250 and reclaim the title of fastest production single-engine aircraft, according to the Kerrville, Texas, firm. The Extra 400, one of the Acclaim's prime

competitors, has dropped out of this year's *Handbook* as the German firm focuses on developing the Extra 500 turboprop.

Moving up into cabin-class twins, many folks are still waiting for Adam to complete post-certification work and clean up IOUs for the turbocharged, pressurized push/pull Adam 500. Nearly a year after basic certification, buyers still are waiting for full operational approval, including pressurization, full IFR authorization and flight into known icing. However, FAA certification authorities say that Adam is making headway on many fronts, so 2006 could be the year that full-scale production deliveries begin.

In the single-engine turboprop sector, EADS Socata is making news with its TBM 850, a TBM 700 with an 850-shp Pratt & Whitney Canada engine that boosts its maximum cruise speed by more than 20 knots. The TBM 850 is limited to 700 hp for landing and takeoff, but once the gear and flaps are retracted, operators can push up the power lever to take advantage of the additional 150 hp. Pilatus also has a new offering, the PC-12/47, signifying its 4,740 kilogram or 10,450 pound MTOW. The boost in weight enables typically equipped aircraft to carry six passengers with full fuel. But aircraft registered in EASA countries are restricted to a 9,920-pound MTOW, so that costs operators three passengers with full tanks.

Ibis has elected to pull its Ae270 from the *Handbook's* listing pending the development of a new wing for the aircraft. This will

enable the aircraft to carry more fuel and raise its MTOW, making it more competitive with the PC-12. The modified Ae270 should reappear in the 2007 *Handbook*. We're still listing the Extra 500 in the single-engine turboprop section; however, the bargain leader in pressurized single-engine turboprops has yet to earn EASA or FAA type certification.

Evolutionary progress continues in the twin-turboprop class. Raytheon's King Air C90GT, powered by twin PT6A-135 engines, is making its debut in this year's *Handbook*. It replaces the C90B. Taking a lesson from Waco, Texas-based Blackhawk Modifications, Raytheon fitted twin PT6A-135 engines to the C90 and boosted its maximum cruise speed by more than 40 KTAS. The engines weigh virtually the same as the -21 turboprops they replace, so there's very little downside to the upgrade, other than slightly increased fuel consumption in cruise. But the C90GT climbs so much faster than the C90B its fuel economy actually is better on typical 300- and 600-nm trips. And it's capable of slashing a half hour off 1,000-nm trips in exchange for an extra 5 percent fuel burn.

Piaggio's Avanti II should be certified by the end of this year or the beginning of 2007. The latest iteration has a Rockwell Collins Pro Line 21 glass cockpit that both increases capabilities and reduces empty weight. The addition of -66B engines will boost high-altitude cruise speed, but precise data won't be

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available until all flight tests are complete.

Glance please at the VLJ section. Production deliveries of both the Eclipse 500 and Cessna Citation Mustang will begin later this year. The Adam 700 becomes the third VLJ to appear in the *Handbook*. FAA insiders say that Adam is making great strides toward restoring its credibility with the folks in the aircraft certification office, so Adam 700 development is getting back on track. Look for initial FAA type certification in the late 2007 to early 2008 time frame.

The VLJ section of the *Handbook* will continue to grow in coming years as Embraer along with upstarts such as Cirrus Design and Diamond Aircraft debut their own VLJs.

Conventional business jets continue to occupy the largest section of the *Handbook*. In 2004, deliveries increased by more than one-quarter. Manufacturers are investing heavily in product development because profit margins are strong, but competition is fierce. Raytheon, for instance, is developing the Premier IA, an updated version of the original design with improved brakes, better systems and upgraded avionics. It was designed to compete head-on with Cessna's CJ2, but Cessna then upped the ante with the CJ2+. It's fitted with highly flat-rated 2,490-pound-thrust Williams FJ44-3-24 turbofans that improve performance, and it's also equipped with much more capable Pro Line 21 avionics, as reported in *B&CA's* April 2006 issue (page 34). The Premier IA retains a significant speed advantage over the CJ2+, but the Cessna has considerably better runway performance. The CJ2+'s spectacular climb performance enables it to arrive within one to six minutes of the Premier IA on typical *B&CA* fixed distance missions.

Sino Swearingen now has earned basic type certification for the SJ30-2, but it's still working on post-certification IOUs prior to full-scale production deliveries. Flight into known icing approval is complete, so



Adam Aircraft

Adam 700

the remaining items should not pose major obstacles to deliveries.

Cessna's Encore+ is new to this year's *Handbook*. The newest iteration of the Citation V is fitted with a fully integrated Collins Pro Line 21 avionics package that both offers more capabilities and reduces BOW by 100 pounds.

This year's *Handbook* welcomes aboard the Grob G180 SPn Utilijet that made a surprise debut at the 2005 Paris Air Show. The G180 is designed to compete head-on with turboprops that operate from unimproved runways. It offers impressive short- and soft-field takeoff performance with range and speed competitive with the CJ3. It can carry seven people with full fuel and it has the largest cabin in the light jet class by a wide margin.

Bombardier continues to refine its Learjet 45 series aircraft. The basic models have been dropped in favor of the 40XR and 45XR, both of which are fitted with Honeywell TFE731-20BR engines, which have robust hot-and-high performance. However, the engines still are limited to 3,500 pounds of thrust for takeoff, so sea-level runway performance is far from class

leading. But when departing hot-and-high airports, these aircraft are considerably more sprightly than any direct competitors. Bombardier's Learjet 60XR, fitted with Pro Line 21 avionics, is appearing for the first time in this year's *Handbook*. The cockpit improvements add new capabilities, but the Learjet 60 needs airframe improvements if it is to remain competitive in the future.

Gulfstream's G150, in contrast, has become considerably more competitive as final flight test data have been analyzed. Its runway performance now is very competitive with most other midsize jets and it can carry four passengers 2,950 miles. That provides coast-to-coast range under most probable wind conditions and one-stop range on transatlantic routes. It's priced between the Learjet 60XR and Raytheon's new Hawker 850XP, which now sports winglets. The aero improvements boost the Hawker 850XP's range by 100 nm, but it still can't match the G150's range performance.

The Hawker 850XP remains Raytheon's top offering as Hawker 4000 type certification and production deliveries remain stalled pending systems development and completion of final function and reliability testing. Although the Hawker 4000 has had a provisional type certificate since December 2004, Raytheon officials are reluctant to predict when full FAA type certification will be earned.

The Falcon 50EX is making its final appearance in the *Purchase Planning Handbook*. Dassault is concentrating on developing its widebody aircraft, such as the Falcon 2000DX, which is making its first appearance in this year's *Handbook*. Similar to the Falcon 900DX, the 2000DX is a version of an existing aircraft that has a lower price tag and less fuel capacity. The 2000DX, which replaces the Falcon 2000, offers better runway performance, more range and better climb performance, plus



Embraer

Embraer Legacy

it's fitted with the Primus Epic EASY cockpit.

Bombardier's Challenger 605, announced at the 2005 NBAA Convention, joins the *Handbook* this year, replacing the Challenger 604. While its performance is virtually identical to the older model, the Challenger 605 offers plenty of improvements for passengers, including larger windows, a slightly wider cabin and better furnishings. It's also 200 pounds lighter, so typically equipped aircraft will be able to carry five to six passengers with full fuel.

Airbus' A318 Elite becomes a new heavyweight in the business aircraft tables. With up to 4,000-nm range with an optional auxiliary center tank, the A318 is intended to compete against veteran, purpose-built heavy iron jets from Bombardier, Dassault and Gulfstream. With 23,300 pounds of thrust on each side, the A318 Elite will offer excellent runway performance, comparing most favorably with purpose-built business jets. Lufthansa Technik is handling completions, so buyers can be confident they'll be built precisely and finished on



Cessna Aircraft

Cessna Mustang

time. So where are the performance numbers? Airbus has undertaken a thorough aerodynamic clean-up of its single-aisle aircraft and the first beneficiary is the A318 Elite. With modified winglets, fuselage-to-wing fairings and inlet duct changes, the A318 Elite will be noticeably more fuel efficient than legacy A318 aircraft.

The 71-ton A318, though, is no match for the largest aircraft in this year's *Handbook*, the BBJ3. Based on the next-generation Boeing 737-900ER airliner, the 94-ton BBJ3 will sport Aviation Partners-Boeing winglets

and have a range of more than 4,700 nm with typical 19- to 24-passenger loads. Offering 28 feet more cabin length than the original BBJ, it's designed for folks who need one-third more cabin volume than the original aircraft and 11 percent more than that offered by the BBJ2.

For now, the surge in business aircraft sales seems secure. Market predictions from Honeywell, Rolls-Royce and other firms indicate strong growth through the decade. But storm clouds in the form of ever-tightening fuel supplies imperil future unrestricted growth. As we mentioned in the 2005 *Handbook*, "... fuel price increases threaten to create an economic microburst in the path of general aviation . . ." Folks flying these aircraft may be able to pay \$5.00 or more per gallon for fuel, but their customers on the ground already are feeling the pinch at the pump at \$3.00 per gallon. Consumer confidence ultimately will determine if the current growth trend in business aircraft will continue or if it will once again suffer through turbulent times. **B&CA**

How to Use the Airplane Charts

Manufacturer, Model

In some cases, the airplane manufacturer's name is abbreviated, but the company's full name and address can be found in the "Airframe Suppliers Directory" on page 168. The model name also is included in this group.

B&CA Equipped Price

Price estimates are first quarter, current year dollars for the next available delivery. Some aircraft have long lead times, thus the actual price will be higher than our published price. Note well, manufacturers may adjust prices without notification.

Piston-powered airplanes — Computed

retail price with at least the level of equipment specified in the *B&CA* Required Equipment List on page 117.

Turbine-powered airplanes — Average price of 10 of the last 12 commercial deliveries, if available. The aircraft serial numbers aren't necessarily consecutive because of variations in completion time and because some aircraft may be configured for non-commercial, special missions.

Characteristics

Seating Capacity — Crew + Typical Executive Seating/Maximum Seating.

For example, 2+8/19 indicates that the aircraft requires two pilots, there

are eight seats in the typical executive configuration and the aircraft is certificated for up to 19 passenger seats.

A four-place single-engine aircraft is shown as 1+3/3, indicating that one pilot is required and there are three other seats available for passengers. We require two pilots for all turboprop airplanes, except the CJ1+, CJ2+, Mustang, Premier I, SJ30-2 and Eclipse 500 which have, or will have, a large percentage of single-pilot operators.

Four crewmembers are specified for ultra-long-range aircraft — three pilots and one flight attendant.

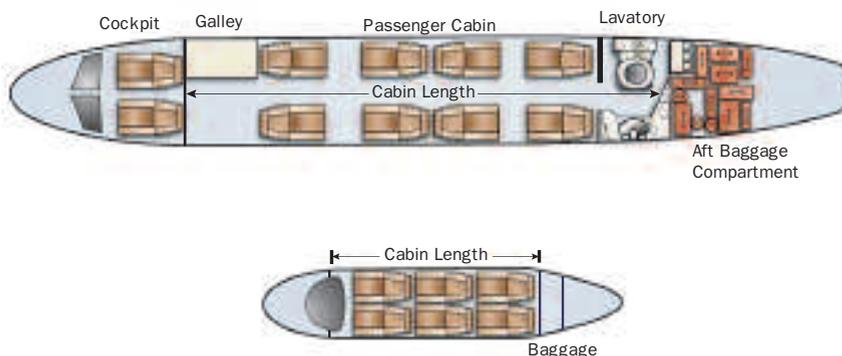
Each occupant of a turbine-powered airplane is assumed to weigh 200 pounds, thus allowing for stowed luggage and carryon items. In the case of piston-engine airplanes, we assume each occupant weighs 170 pounds. There is no luggage allowance for piston-engine airplanes.

Wing Loading — MTOW divided by total wing area.

Power Loading — MTOW divided by total rated horsepower or total rated thrust.

FAR Part 36 Certificated Noise Levels — Flyover noise in A-weighted decibels (dBA) for small and turboprop aircraft. For turboprop-powered aircraft, we provide EPNdB (effective perceived noise levels) for takeoff, sideline and approach.

Cabin Length



Dimensions

External Length, Height and Span dimensions are provided for use in determining hangar and/or tiedown space requirements.

Internal Length, Height and Width are based on a completed interior, including insulation, upholstery, carpet, carpet padding and fixtures.

As shown in the Cabin Length illustration, for airplanes other than “cabin-class” models, the length is measured from the forward bulkhead ahead of the rudder pedals to the back of the rear-most passenger seat in its normal, upright position.

For “cabin-class” aircraft, we show the overall length of the passenger cabin, measured from the aft side of the forward cabin divider to the aft-most bulkhead of the cabin. The aft-most point is defined by the rear side of a baggage compartment that is accessible to passengers in flight or by the aft pressure bulkhead.

The overall length is reduced by the length of any permanent mounted system or structure that is installed in the fuselage ahead of the aft bulkhead. For example, some aircraft have full fuselage cross-section fuel tanks mounted ahead of the aft pressure bulkhead.

The second length number is the net length of the cabin that may be occupied by passengers. It’s measured from the aft side of the forward cabin divider to an aft point defined by the rear of the cabin floor capable of supporting passenger seats, the rear wall of an aft galley or lavatory, an auxiliary pressure bulkhead or the front wall of the pressurized baggage compartment. Some aircraft have the same net and overall interior length because the manufacturer offers at least one interior configuration with the aft-most passenger seat located next to the front wall of the aft luggage compartment.

Interior height is measured at the center of the cross section. It may be based on an aisle that is dropped several inches below the main cabin floor that supports the passenger seats. Some aircraft have dropped aisles of varying depths, resulting in less available interior height in certain sections of the cabin.

Two width dimensions are shown for multiengine turbine airplanes — one at the widest part of the cabin and the other at floor level. The dimensions, however, are not completely indicative of the usable space in a specific aircraft because of individual variances in interior furnishings.



Gulfstream 450

Gulfstream Aerospace

Power

Number of engines, if greater than one, and the abbreviated name of the manufacturer:

CFE — ASE/GE joint venture

RR — Rolls-Royce

CFMI — CFM International

Cont — Teledyne Continental

Hon — Honeywell

IAE — International Aero Engines

Lyc — Textron Lycoming

P&WC — Pratt & Whitney Canada

Wms/RR — Williams/Rolls-Royce

Output — Takeoff rated horsepower for propeller-driven aircraft or pounds thrust for turbofan aircraft. If an engine is flat rated, enabling it to produce takeoff rated output at a higher than ISA (standard day) ambient temperature, the flat rating limit is shown as ISA+XX°C. Highly flat-rated engines, i.e., engines that can produce takeoff rated thrust at a much higher than standard ambient temperature, typically provide substantially improved high-density altitude and high-altitude cruise performance.

Inspection Interval is the longest, scheduled hourly major maintenance interval for the engine, either “t” for TBO or “c” for compressor zone inspection. OC is shown only for engines that have “on condition” repair or replace parts maintenance.

Weights (lb)

Weight categories are listed as appropriate to each class of aircraft.

Max Ramp — Maximum ramp weight for taxi.

Max Takeoff — Max takeoff weight as determined by structural limits.

Max Landing — Max landing weight as determined by structural limits.

Zero Fuel — Maximum zero fuel

weight, shown by “c” indicating the certificated MZFW or “b,” a B&CA-computed weight based on MTOW minus the weight of fuel required to fly 1.5 hours at high-speed cruise.

Max ramp, max takeoff and max landing weights may be the same for light aircraft that may only have a certificated max takeoff weight.

EOW/BOW — Empty operating weight is shown for piston-powered airplanes. Basic operating weight, which essentially is EOW plus required flightcrew, is shown for turbine-powered airplanes. EOW is based on the factory standard weight, plus items specified in the B&CA Required Equipment List, less fuel and oil. BOW, in contrast, is based on the average EOW weight of the last 10 commercial deliveries, plus 200 pounds for each required crewmember. We require four crewmembers — three flight crew and one cabin attendant — for ultra-long-range aircraft.

There is no requirement to add in the weight of cabin stores, but some manufacturers choose to include galley stores and passenger supplies as part of the BOW buildup. Life vests, life rafts and appropriate deep-water survival equipment are included in the weight buildup of the 80,000-pound-plus, ultra-long-range aircraft.

Max Payload — Zero fuel weight minus EOW or BOW, as appropriate. For piston-engine airplanes, max payload frequently is a computed value because it is based on the B&CA (“b”) computed maximum ZFW.

Executive Payload — Based on 170 pounds per occupant for multiengine piston-engine airplanes and 200 pounds per occupant for turbine-engine airplanes, as shown in the executive seating section of the “Characteristics” section. Pilots and passen-

gers, however, are counted as occupants in piston-engine airplanes. Only passengers are counted as occupants in turbine-powered airplanes because the required crew is included in the BOW. If the executive payload exceeds the maximum payload, we use maximum payload. Executive payload is not computed for single-engine piston airplanes.

Max Fuel — Usable fuel weight based on 6.0 pounds per U.S. gallon for avgas or 6.7 pounds per U.S. gallon for jet fuel. Fuel capacity includes optional, auxiliary and long-range tanks, unless otherwise noted.

Available Payload With Max Fuel — Max ramp weight minus the tanks-full weight, not to exceed zero fuel weight minus EOW or BOW.

Available Fuel With Max Payload — Max ramp weight minus zero fuel weight, not to exceed maximum fuel capacity.

Available Fuel With Executive Payload — Available fuel weight based on max ramp weight minus BOW plus executive payload, up to the actual fuel capacity.

Limits

B&CA lists V speeds and other limits as appropriate to the class of airplane. These are the abbreviations used on the charts:

VNE — Never exceed speed (red line for piston-engine airplanes).

VNO — Normal operating speed (top of green arc for piston-engine airplanes).

Vmo — Maximum operating speed (red line for turbine-powered airplanes).

Mmo — Maximum operating Mach

number (red line for turbofan-powered airplanes and a few turboprop airplanes).

FL/Vmo — Transition altitude at which Vmo equals Mmo (large turboprop and turbofan aircraft).

Va — Maneuvering speed (except for certain large turboprop and all turbofan aircraft).

VDEC — Accelerate/stop decision speed (multiengine piston and light multiengine turboprop airplanes).

Vmca — Minimum control airspeed, airborne (multiengine piston and light multiengine turboprop airplanes).

Vso — Maximum stalling speed, landing configuration (single-engine airplanes) in KCAS.

Vx — Best angle-of-climb speed (single-engine airplanes).

Vxse — Best angle-of-climb speed, one-engine inoperative (multiengine piston and multiengine turboprop airplanes under 12,500 pounds).

Vy — Best rate-of-climb speed (single-engine airplanes).

Vyse — Best rate-of-climb speed, one-engine inoperative (multiengine piston and multiengine turboprop airplanes under 12,500 pounds).

V2 — Takeoff safety speed (large turboprops and turbofan airplanes).

Vref — Reference landing approach speed (large turboprops and turbofan airplanes, four passengers, NBAA IFR reserves; eight passengers for ultra-long-range aircraft).

PSI — Cabin pressure differential (all pressurized airplanes).

Airport Performance

Approved Flight Manual takeoff runway performance is shown for sea-level, standard day and for 5,000 feet elevation/25°C day, density altitude. **All-engine takeoff distance (TO)** is shown for single-engine and multiengine piston, and turboprop airplanes with an MTOW of less than 12,500 pounds.

Accelerate/Stop distance (A/S) is shown for small multiengine piston and small turboprop airplanes. Takeoff field length (TOFL), the greater of the one-engine inoperative (OEI) takeoff distance or the accelerate/stop distance, is shown for FAR Part 23 Commuter Category and Part 25 airplanes. If the accelerate/stop and OEI accelerate/go distances are equal, the TOFL is the balanced field length.

Landing distance (LD) is shown for Part 23 Commuter Category and Part 25 Transport Category airplanes. The landing weight is BOW plus four passengers and NBAA IFR fuel reserves. We assume that 80,000-pound-plus ultra-long-range aircraft will have eight passengers on board.

The V2 and VREF speeds are useful for reference when comparing the TOFL and LD numbers because they provide an indication of potential minimum-length runway performance when low RCR or runway gradient is a factor.

B&CA lists two additional numbers for large turboprop- and turbofan-powered airplanes. First, we publish the **Mission Weight**, which is the lower of:

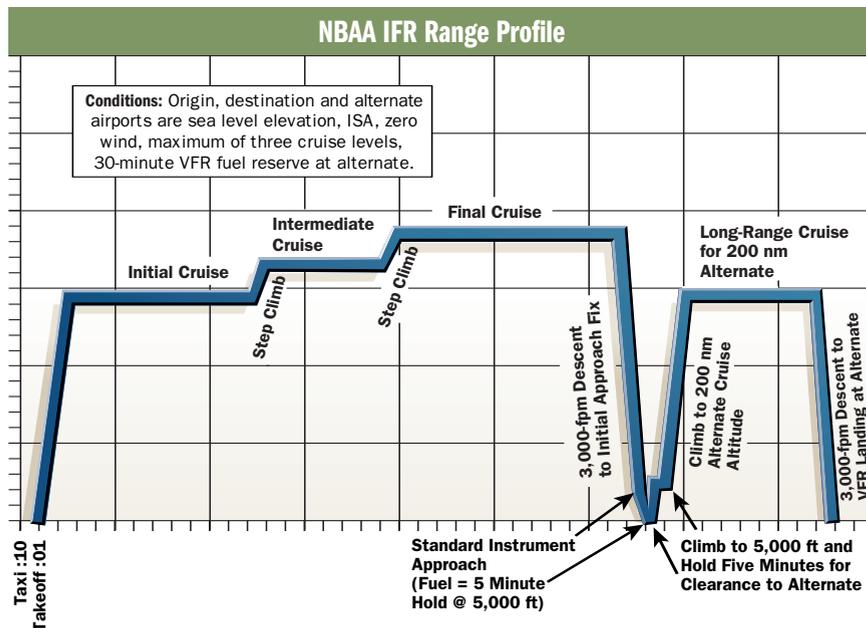
(1) The actual takeoff weight with four passengers (eight passengers for ULR aircraft) and full fuel when departing from a 5,000-foot/25°C airport.

(2) The maximum allowable takeoff weight based when departing with the same passenger load and at the same density altitude.

For two-engine aircraft, the mission weight, when departing from a 5,000-foot, ISA+20°C airport, may be less than the MTOW because of Part 25 second-segment, OEI, climb performance requirements. Aircraft with highly flat-rated engines are less likely to have a mission weight that is performance limited when departing from hot-and-high airports.

For three- or four-engine aircraft, the mission weight usually is based on full tanks and the actual number of passengers, rather than being performance limited.

Second, we publish the **NBAA IFR Range** for the hot-and-high departure mission weight, assuming a transition into standard day, ISA flight conditions after take-



off. For purposes of computing NBAA IFR range, the aircraft is flown at the long-range cruise speed shown in the "Cruise" block or at the same speed as shown in the "Range" block.

Climb

The all-engine time to climb provides an indication of overall climb performance, especially if the aircraft has an all-engine service ceiling well above our sample top-of-climb altitudes.

We provide the all-engine time to climb to one of three specific altitudes, based on type of aircraft departing at MTOW from a sea-level, standard-day airport:

(1) FL 100 (10,000 feet) for normally aspirated single-engine and multiengine piston aircraft, plus pressurized single-engine piston aircraft and un-pressurized turboprop aircraft.

(2) FL 250 for pressurized single-engine and multiengine turboprops.

(3) FL 370 for turbofan-powered aircraft. The data are published as time to climb in minutes/climb altitude. For example, if a non-pressurized twin-engine piston aircraft can depart from a sea-level airport at MTOW and climb to 10,000 feet in eight minutes, the time to climb is expressed as 8/FL 100.

We also publish the initial all-engine climb feet-per-nautical-mile gradient, plus initial engine-out climb rate and gradient, for single-engine and multi-engine pistons and turboprops with MTOWs of 12,500 pounds or less.

The OEI climb rate for multiengine aircraft at MTOW is derived from the Airplane Flight Manual. OEI climb rate and gradient is based on landing gear retracted and wing flaps in the takeoff configuration used to compute the published takeoff distance.

The climb gradient for such airplanes is obtained by dividing the product of the climb rate (fpm) in the Airplane Flight Manual times 60 by the V_Y or V_{YSE} climb speed, as appropriate.

The OEI climb gradients we show for Part 23 Commuter Category and Part 25 Transport Category aircraft are the second-segment net climb performance numbers published in the AFMs. Please note:

The AFM net second-segment climb performance numbers are adjusted downward by 0.8 percent to compensate for variations in pilot technique and ambient conditions.

The OEI climb gradient is computed at the same flap configuration used to calculate the takeoff field length.



Bombardier Learjet 45XR

Ceilings (ft)

Maximum Certificated Altitude — Maximum allowable operating altitude determined by airworthiness authorities.

All-Engine Service Ceiling — Maximum altitude at which at least a 100-fpm rate of climb can be attained, assuming the aircraft departed a sea-level, standard-day airport at MTOW and climbed directly to altitude.

OEI (engine-out) Service Ceiling — Maximum altitude at which a 50-fpm rate of climb can be attained, assuming the aircraft departed a sea-level, standard-day airport at MTOW and climbed directly to altitude.

Sea-Level Cabin — Maximum cruise altitude at which a 14.7-psia, sea-level cabin altitude can be maintained in a pressurized airplane.

Cruise

Cruise performance is computed using EOW with four occupants or BOW with four passengers and one-half fuel load. Ultra-long-range aircraft carry eight passengers for purposes of computing cruise performance. Assume 170 pounds for each occupant of a piston-engine airplane and 200 pounds for each occupant of a turbine-powered aircraft.

Long Range — **TAS, Fuel Flow** in pounds/hour, flight level (FL) cruise **Altitude** and **Specific Range** for long-range cruise by the manufacturer.

Recommended (piston-engine airplanes) — **TAS, Fuel Flow** in pounds/hour, flight level (FL) cruise **Altitude** and **Specific Range** for normal cruise performance specified by the manufacturer.

High Speed — **TAS, Fuel Flow** in pounds/hour, flight level (FL) cruise **Altitude** and **Specific Range** for short-range, high-speed performance specified by the manufacturer.

Speed, fuel flow, specific range and altitude in each category are based on one mid-weight cruise point. They are not an average for the overall mission.

B&CA imposes a 12,000-foot maximum cabin altitude requirement on CAR3/ FAR Part 23 normally aspirated aircraft. Turbocharged airplanes are limited to FL 250, providing they are fitted with supplemental oxygen systems having sufficient capacity for all occupants for the duration of the mission.

Pressurized CAR 3/FAR Part 23 aircraft are limited to a maximum cabin altitude of 10,000 feet. For Part 23 Commuter Category and Part 25 aircraft, the maximum cabin altitude for computing cruise performance is 8,000 feet.

To conserve space, we use flight levels (FL) for all cruise altitudes, which is appropriate considering that we assume standard day ambient temperature and pressure conditions. Cruise performance is subject to B&CA's verification.

NOTICE TO READERS

During recent years, the U.S. Federal Trade Commission has conducted investigations into the practice of certain industries in fixing and advertising list prices. It is the position of the FTC that it is deceptive to the public and against the law for list prices of any product to be specified or advertised in a trade area if the majority of sales are made at less than those prices.

B&CA is not in a position to know the prices for most of the sales in each trading area in the United States for each of the products in this issue. Therefore, the prices shown in the tables and text in the *Purchase Planning Handbook* are based on suggested list prices furnished to us by the manufacturers or distributors, or on prices estimated by the editors. It may be possible to purchase some items in your trading area at prices less than those reported in this issue of B&CA. Also, almost all manufacturers and distributors caution that prices are subject to change without notice.



Dassault 2000EX

Ranges

B&CA shows various paper missions for each aircraft that illustrate range versus payload tradeoffs, runway and cruise performance, plus fuel efficiency. Similar to the cruise profile calculations, B&CA limits the maximum altitude to 12,000 feet for normally aspirated, non-pressurized CAR 3/FAR Part 23 aircraft, 25,000 feet for turbocharged airplanes with supplemental oxygen, 10,000 feet cabin altitude for pressurized CAR 3/FAR Part 23 airplanes and 8,000 feet cabin altitude for Part 23 Commuter Category or Part 25 aircraft.

Seats-Full Range (single-engine piston airplanes) — Based on typical executive configuration with all seats filled with 170-pound occupants, with maximum available fuel less 45-minute IFR fuel reserves. We use the lower of seats full or maximum payload.

Tanks-Full Range (single-engine piston airplanes) — Based on one 170-pound pilot, full fuel less 45-minute IFR fuel reserves.

Executive Payload (multiengine piston airplanes and single-engine turboprops) — Based on typical executive configuration with all seats filled with 170-pound occupants, maximum available fuel less 45-minute IFR fuel reserves.

We use the lower of seats full or maximum payload.

Max Fuel With Available Payload (single-engine turboprops) — Based on BOW, plus full fuel and the maximum available payload up to maximum ramp weight. Range is based on arriving at destination with NBAA IFR fuel reserves, but only a 100-mile alternate is required.

Ferry (multiengine piston airplanes and single-engine turboprops) — Based on one 170-pound pilot, maximum fuel less 45-minute IFR fuel reserves.

Please note: None of the missions for piston-engine aircraft include fuel for diverting to an alternate. However, single-engine turboprops are required to have NBAA IFR fuel reserves, but only a 100-mile alternate is required.

NBAA IFR range format cruise profiles, having a 200-mile alternate, are used for Part 25 Transport Category turbine-powered aircraft. In the case of Part 23 turboprops, including those certificated in the Commuter Category, and Part 23 turboprop aircraft, only a 100-mile alternate is needed. The difference in alternate requirements should be kept in mind when comparing range performance of various classes of aircraft.

Max Payload With Available Fuel (multi-engine turbine airplanes) — Based on aircraft loaded to maximum zero fuel weight with maximum available fuel up to maximum ramp weight, less NBAA IFR fuel reserves at destination.

Max Fuel With Available Payload (multi-engine turbine airplanes) — Based on BOW plus full fuel and maximum available payload up to maximum ramp weight. Range based on NBAA IFR reserves at destination.

Full/Max Fuel With Four Passengers (multi-engine turbine airplanes) — Based on BOW plus four 200-pound passengers



M28 Skytruck

and the lesser of full fuel or maximum available fuel up to maximum ramp weight. Ultra-long-range aircraft must have eight passengers on board.

Ferry (multiengine turbine airplanes) — Based on BOW, required crew and full fuel, arriving at destination with NBAA IFR fuel reserves.

We allow 2,000-foot increment step climbs above the initial cruise altitude to improve specific range performance. The altitude shown in the range section is the highest cruise altitude for the trip — not the initial cruise or mid-mission altitude.

The range profiles are in **Nautical Miles**, and the **Average Speed** is computed by dividing that distance by the total flight time or weight-off-wheels time en route. The **Fuel Used** or **Trip Fuel** includes the fuel consumed for start, taxi, takeoff, cruise, descent and landing approach, but not after-landing taxi or reserves.

The **Specific Range** is obtained by dividing the distance flown by the total fuel burn. The altitude is the highest cruise altitude achieved on the specific mission profile shown.

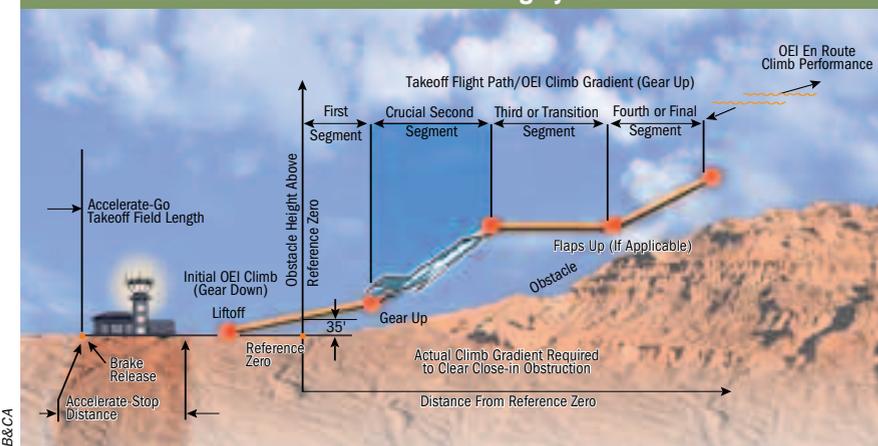
Missions

Various paper missions are computed to illustrate the runway requirements, speeds, fuel burns and specific range, plus cruise altitudes. The mission ranges are chosen to be representative for the airplane category.

All fixed-distance missions are flown with four passengers on board, except for ultra-long-range airplanes, which have eight passengers on board. The pilot is counted as a passenger on board piston-engine airplanes. If an airplane cannot complete a specific fixed distance mission with the appropriate payload, B&CA shows a reduction of payload in the remarks section or marks the fields NP (Not Possible) at our option.

Runway performance is obtained from the Approved Airplane Flight

FAR Part 25 and Part 23 Commuter Category OEI Climb Performance



SINGLE-ENGINE PISTONS NORMALLY ASPIRATED

Manufacturer Model	Cirrus Design SR20-G2 SR20	Cessna Skylane CE-182T	Cirrus Design SR22-G2 SR22	New Piper Arrow PA-28R-200	Lancair Columbia 350 LC42-550FG	
B&CA Equipped Price	\$249,750	\$326,150	\$349,750	\$360,650	\$378,900	
Characteristics						
Seating	1+3/3	1+3/3	1+3/3	1+3/3	1+3/3	
Wing Loading	22.2	17.8	23.5	16.2	24.1	
Power Loading	15.00	13.48	10.97	13.75	10.97	
Noise (dBA)	83.4	77.7	83.7	75.5	84.0	
Dimensions External (ft)						
Length	26.0	29.0	26.0	24.7	25.2	
Height	8.6	9.3	8.8	7.9	9.0	
Span	35.5	36.0	38.3	35.4	36.1	
Internal						
Length	8.0	7.2	8.0	7.3	7.9	
Height	4.1	4.0	4.1	4.1	4.2	
Width	4.1	3.5	4.1	3.5	4.2	
Power						
Engine	Cont IO-360-ES	Lyc IO-540-AB1A5	Cont IO-550-N	Lyc IO-360-C1C6	Cont IO-550-N	
Output (hp)	200 hp	230 hp	310 hp	200 hp	310 hp	
Inspection Interval	2,000t	2,000t	1,700t	2,000t	2,000t	
Weights (lb)						
Max Ramp	3,000	3,110	3,400	2,758	3,400	
Max Takeoff	3,000	3,100	3,400	2,750	3,400	
Max Landing	2,900	2,950	3,400	2,750	3,230	
Zero Fuel	2,900c	2,985b	3,250b	2,645b	3,228c	
EOW	2,070	1,944	2,250	1,787	2,400	
Max Payload	830	1,041	1,000	858	828	
Useful Load	930	1,166	1,150	971	1,000	
Max Baggage	130	200	130	200	120	
Max Fuel	336	522	486	432	588	
Available Payload w/Max Fuel	594	644	664	539	412	
Available Fuel w/Max Payload	100	126	150	113	172	
Limits						
VNE	200	175	201	186	235	
VNO	165	140	178	148	179	
VA	131	110	133	120	148	
Airport	TO (SL elev./ISA temp.)	2,064	1,350	1,575	1,600	1,250
Performance	TO (5,000' elev. @25 C)	3,486	2,708	2,717	3,200	1,800
Vso	56	50	59	55	57	
Vx	81	65	78	72	80	
Vy	96	82	101	90	106	
Climb	Time to Climb (min.)/Altitude	16/FL 100	15/FL 100	10/FL 100	17/FL 100	11/FL 100
	Initial Gradient (ft/nm)	581	694	864	584	947
Ceiling (ft)	Service	17,500	18,100	17,500	16,200	18,000
Cruise	Long	TAS 140	123	162	117	154
	Range	Fuel Flow 50	60	79	48	64
		Altitude FL 080	FL 100	FL 080	FL 080	FL 080
		Specific Range 2.800	2.050	2.051	2.438	2.406
	Rec'd	TAS 152	135	172	131	183
		Fuel Flow 63	68	91	55	97
		Altitude FL 080	FL 100	FL 080	FL 080	FL 080
		Specific Range 2.413	1.985	1.890	2.382	1.887
	High	TAS 159	140	181	142	191
	Speed	Fuel Flow 70	77	100	70	104
		Altitude FL 080	FL 060	FL 080	FL 080	FL 080
		Specific Range 2.271	1.818	1.810	2.029	1.837
Ranges	Seats	Nautical Miles 584	735	841	327	580
	Full	Average Speed 140	120	162	136	153
		Fuel Used 210	435	411	159	320
		Specific Range/Altitude 2.781/FL 080	1.690/FL 060	2.046/FL 080	2.057/FL 080	1.813/FL 080
	Tanks	Nautical Miles 764	980	873	907	1,242
	Full	Average Speed 140	123	162	135	153
		Fuel Used 275	471	427	396	515
		Specific Range/Altitude 2.778/FL 080	2.081/FL 100	2.044/FL 080	2.290/FL 080	2.412/FL 080
Missions (4 occupants)	200 nm	Runway 1,446	1,514	1,020	1,350	1,250
		Block Time 1 + 18	1 + 29	1 + 06	1 + 28	1 + 10
		Fuel Used 100	128	122	107	109
		Specific Range/Altitude 2.000/FL 080	1.563/FL 060	1.639/FL 080	1.869/FL 080	1.835/FL 080
	500 nm	Runway 1,446	1,514	1,341	1,480	1,250
		Block Time 3 + 17	3 + 37	2 + 45	3 + 41	2 + 48
		Fuel Used 226	274	308	230	246
		Specific Range/Altitude 2.212/FL 080	1.825/FL 060	1.623/FL 080	2.174/FL 080	2.033/FL 120
Remarks	Suggested Base Price	\$236,700	\$258,500	\$334,700	\$292,400	\$378,900
	Certification Basis	FAR 23, 1999	FAR 23, 1996/01 Includes G1000 with TIS, XM wx and Stormscope.	FAR 23, 2000	CAR 3, 1960/78	FAR 23 Includes Avidyne Entegra.

SINGLE-ENGINE PISTONS NORMALLY ASPIRATED

Manufacturer Model	Socata Trinidad GT TB-20 GT	Mooney Ovation2 GX M-20R	Cessna Stationair CE-206H	New Piper Piper 6X PA-32-201FT	Beechcraft Bonanza G36		
B&CA Equipped Price	\$381,500	\$442,000	\$448,160	\$453,000	\$691,390		
Characteristics							
Seating	1+3/4	1+3/4	1+5/5	1+4/5	1+4/5		
Wing Loading	24.1	19.3	20.2	20.2	20.2		
Power Loading	12.34	12.03	12.00	12.00	12.17		
Noise (dBA)	74.0	72.6	84.5	83.9	76.7		
Dimensions External (ft)							
Length	25.3	26.9	28.3	27.9	27.5		
Height	9.4	8.3	9.3	8.5	8.6		
Span	32.1	36.1	36.0	36.2	33.5		
Internal							
Length	8.3	8.1	9.3	9.7	12.6		
Height	3.9	3.7	4.1	3.5	4.2		
Width	4.2	3.6	3.7	4.1	3.5		
Power							
Engine	Lyc IO-540-C4D5D	Cont IO-550-G	Lyc IO-540-AC1A5	Lyc IO-540-K1G5	Cont IO-550-B		
Output (hp)	250 hp	280 hp	300 hp	300 hp	300 hp		
Inspection Interval	2,000t	2,000t	2,000t	2,000t	1,700t		
Weights (lb)							
Max Ramp	3,097	3,374	3,614	3,615	3,663		
Max Takeoff	3,086	3,368	3,600	3,600	3,650		
Max Landing	3,086	3,200	3,600	3,600	3,650		
Zero Fuel	2,959b	3,226b	3,448b	3,434b	3,509b		
EOW	1,815	2,260	2,202	2,214	2,530		
Max Payload	1,144	966	1,246	1,220	979		
Useful Load	1,282	1,114	1,412	1,401	1,133		
Max Baggage	143	120	200	200	670		
Max Fuel	517	612	522	612	444		
Available Payload w/Max Fuel	765	502	890	789	689		
Available Fuel w/Max Payload	139	149	166	182	154		
Limits							
VNE	189	195	182	189	203		
VNO	151	174	149	150	165		
VA	130	123	125	132	139		
Airport	TO (SL elev./ISA temp)	2,083	1,620	1,860	2,028	1,913	
Performance	TO (5,000' elev. @25 C)	3,400	1,980	3,375	3,763	4,145	
Vso	58	59	57	59	59		
Vx	81	80	70	80	84		
Vy	95	105	86	90	100		
Climb	Time to Climb (min.)/Altitude	12/FL 100	11/FL 100	15/FL 100	15/FL 100	14/FL 100	
	Initial Gradient (ft/nm)	783	714	691	967	730	
Ceiling (ft)	Service	20,000	20,000	15,700	17,200	18,500	
Cruise	Long	TAS	139	163	127	136	137
	Range	Fuel Flow	64	50	78	87	56
		Altitude	FL 100	FL 120	FL 120	FL 120	FL 120
		Specific Range	2.172	3.260	1.628	1.563	2.446
	Rec'd	TAS	151	186	135	144	163
		Fuel Flow	73	84	88	99	80
		Altitude	FL 100	FL 120	FL 080	FL 100	FL 100
		Specific Range	2.068	2.214	1.534	1.455	2.038
	High	TAS	165	190	142	149	174
	Speed	Fuel Flow	85	95	100	111	94
		Altitude	FL 100	FL 080	FL 060	FL 070	FL 080
		Specific Range	1.941	2.000	1.420	1.342	1.851
Ranges	Seats	Nautical Miles	715	1,075	326	403	527
	Full	Average Speed	150	161	123	128	130
		Fuel Used	355	438	326	386	240
		Specific Range/Altitude	2.014/FL 100	2.454/FL 120	1.000/FL 060	1.044/FL 080	2.196/FL 040
	Tanks	Nautical Miles	935	1,465	595	800	930
	Full	Average Speed	149	173	127	132	140
		Fuel Used	469	558	456	547	403
		Specific Range/Altitude	1.994/FL 100	2.625/FL 120	1.305/FL 120	1.463/FL 100	2.308/FL 080
Missions (4 occupants)	200 nm	Runway	1,560	1,230	1,860	1,500	1,750
		Block Time	1 + 12	1 + 13	1 + 33	1 + 25	1 + 11
		Fuel Used	104	115	166	159	130
		Specific Range/Altitude	1.923/FL 100	1.739/FL 050	1.205/FL 060	1.258/FL 100	1.538/FL 060
	500 nm	Runway	1,650	1,290	1,860	1,720	1,850
		Block Time	3 + 11	2 + 58	3 + 36	3 + 50	2 + 54
		Fuel Used	248	221	377	359	304
		Specific Range/Altitude	2.016/FL 100	2.262/FL 100	1.326/FL 060	1.393/FL 100	1.645/FL 060
Remarks	Suggested Base Price	\$381,500	\$442,000	\$448,160	\$382,900	\$667,000	
	Certification Basis	FAR 23, 1981/84 Includes KFC225, KMD 550, WX 500; Garmin 430/530 opt'l.	CAR 3, 1955/94 Includes Garmin G1000.	FAR 23, 1998 Includes G1000 with TIS, XM wx and Stormscope.	CAR 3, 1965/96 Includes Avidyne Entegra.	CAR 3, 1956/69/83/05 Includes Garmin G1000.	

SINGLE-ENGINE PISTONS TURBOCHARGED

Manufacturer Model	Cessna Turbo Skylane CE-T182T	Socata Trinidad GT T/C TB-21 GT	Lancair Columbia 400 LC41-550-FG	Cessna Turbo Stationair CE-T206H	New Piper Piper 6XT PA-32-301XTC	Mooney Acclaim MO-20TN
B&CA Equipped Price	\$355,050	\$431,670	\$479,900	\$482,160	\$490,315	\$495,000
Characteristics						
Seating	1+3/3	1+3/4	1+3/4	1+5/5	1+4/5	1+3/5
Wing Loading	17.8	24.1	25.5	20.7	20.2	19.3
Power Loading	13.19	12.34	11.61	11.61	12.00	12.03
Noise (dBA)	75.4	76.0	79.0	75.8	77.6	TBD
Dimensions External (ft)						
Length	29.0	25.3	25.2	28.3	27.9	26.9
Height	9.4	9.4	9.0	9.3	8.5	8.3
Span	36.0	32.1	36.1	36.0	36.2	36.4
Internal						
Length	7.2	8.3	7.9	9.3	9.7	8.1
Height	4.0	3.9	4.2	4.1	3.5	3.7
Width	3.5	4.2	4.2	3.7	4.1	3.6
Power						
Engine	Lyc TIO-540-AK1A	Lyc TIO-540-AB1AD	Cont TSIO-550-C	Lyc TIO-540-AJ1A	Lyc TIO-540-AH1A	Cont TSIO-550-G
Output (hp)	235 hp	250 hp	310 hp	310 hp	300 hp	280 hp
Inspection Interval	2,000t	2,000t	2,000t	2,000t	2,000t	2,000t
Weights (lb)						
Max Ramp	3,112	3,086	3,600	3,617	3,615	3,374
Max Takeoff	3,100	3,086	3,600	3,600	3,600	3,368
Max Landing	2,950	3,086	3,420	3,600	3,600	3,200
Zero Fuel	2,971b	2,939b	3,390b	3,429b	3,420b	3,152b
EOW	2,042	1,990	2,500	2,319	2,274	2,353
Max Payload	929	949	890	1,110	1,146	799
Useful Load	1,070	1,096	1,100	1,298	1,341	1,021
Max Baggage	200	143	120	200	200	120
Max Fuel	522	517	588	522	612	612
Available Payload w/Max Fuel	548	579	512	776	729	409
Available Fuel w/Max Payload	141	147	210	190	195	222
Limits						
VNE	175	189	230	182	189	195
VNO	140	151	181	149	150	174
VA	110	130	158	125	132	127
Airport						
TO (SL elev./ISA temp.)	1,350	1,922	1,300	1,740	1,888	1,620
Performance						
TO (5,000' elev. @25 C)	1,928	2,411	1,730	2,498	2,742	1,980
Vso	50	59	59	57	59	60
Vx	64	81	82	69	80	80
Vy	84	95	110	89	90	105
Climb						
Time to Climb/Altitude	10/FL 100	10/FL 100	7/FL 100	11/FL 100	14/FL 100	7/FL 100
Initial Gradient (ft/nm)	743	711	993	724	680	1,125
Ceilings (ft)						
Certificated	20,000	25,000	25,000	25,000	20,000	25,000
Service	20,000	25,000	25,000	27,000	20,000	25,000
Cruise						
Long Range						
TAS	132	140	208	137	139	200
Fuel Flow	62	67	78	85	75	81
Altitude	FL 200	FL 100	FL 250	FL 240	FL 120	FL 250
Specific Range	2.129	2.090	2.667	1.612	1.853	2.469
Rec'd						
TAS	147	154	227	154	156	230
Fuel Flow	72	74	120	98	102	144
Altitude	FL 200	FL 100	FL 250	FL 240	FL 120	FL 250
Specific Range	2.042	2.081	1.892	1.571	1.529	1.597
High Speed						
TAS	158	166	235	164	164	230
Fuel Flow	86	98	140	114	120	144
Altitude	FL 200	FL 150	FL 250	FL 200	FL 120	FL 250
Specific Range	1.837	1.694	1.679	1.439	1.367	1.597
Ranges						
Seats						
Nautical Miles	542	484	831	202	361	520
Full						
Average Speed	121	154	203	126	132	195
Fuel Used	334	246	325	204	319	274
Specific Range/Altitude	1.623/FL 060	1.967/FL 150	2.557/FL 100	0.990/FL 060	1.132/FL 100	1.898/FL 200
Tanks						
Nautical Miles	814	917	1,279	547	945	1,200
Full						
Average Speed	132	153	203	136	137	198
Fuel Used	468	461	493	448	547	551
Specific Range/Altitude	1.739/FL 200	1.989/FL 100	2.594/FL 250	1.221/FL 200	1.728/FL 100	2.178/FL 250
Missions (4 occupants)						
200 nm						
Runway	1,860	1,560	1,300	1,740	1,500	1,340
Block Time	1 + 28	1 + 12	1 + 03	1 + 25	1 + 25	1 + 02
Fuel Used	143	111	155	188	159	135
Specific Range/Altitude	1.399/FL 060	1.802/FL 100	1.290/FL 250	1.064/FL 060	1.258/FL 080	1.481/FL 120
500 nm						
Runway	1,860	1,650	1,300	1,740	1,700	1,620
Block Time	3 + 05	3 + 11	2 + 24	3 + 13	3 + 19	2 + 30
Fuel Used	300	244	322	416	356	270
Specific Range/Altitude	1.667/FL 200	2.049/FL 100	1.553/FL 250	1.202/FL 200	1.404/FL 140	1.852/FL 250
Remarks						
Suggested Base Price	\$355,050	\$431,670	\$479,900	\$482,160	\$401,600	\$495,000
Certification Basis	FAR 23, 2001 Includes Garmin G1000.	FAR 23, 1986 Includes KFC225.	FAR 23 Includes Avidyne Entegra.	FAR 23, 1998 Includes Garmin G1000.	CAR 3 56/97 Includes Avidyne FlightMax Entegra.	CAR 3, 1955/89/pend. Includes Garmin G1000 . All data preliminary.

SINGLE-ENGINE PISTONS TURBOCHARGED

Manufacturer Model		New Piper Saratoga II TC PA-32R-301T		
B&CA Equipped Price		\$581,600		
Characteristics	Seating	1+4/5		
	Wing Loading	20.2		
	Power Loading	12.00		
	Noise (dBA)	76.6		
Dimensions External (ft)	Length	27.9		
	Height	8.5		
	Span	36.2		
	Internal	Length	9.7	
		Height	3.5	
		Width	4.1	
Power	Engine	Lyc TIO-540-AH1A		
	Output (hp)	300 hp		
	Inspection Interval	2,000t		
	Weights (lb)	Max Ramp	3,615	
Max Takeoff		3,600		
Max Landing		3,600		
Zero Fuel		3,420b		
EOW		2,486		
Max Payload		934		
Useful Load		1,129		
Max Baggage		200		
Max Fuel		612		
Available Payload w/Max Fuel		517		
Available Fuel w/Max Payload		195		
Limits		VNE	197	
	VNO	154		
	VA	134		
Airport Performance	TO (SL elev./ISA temp.)	1,810		
	TO (5,000' elev. @25°C)	2,680		
Performance	Vso	63		
	Vx	85		
	Vy	95		
	Climb	Time to Climb/Altitude	9/FL 100	
Initial Gradient (ft/nm)		753		
Ceilings (ft)	Certificated	20,000		
	Service	20,000		
Cruise	Long Range	TAS	166	
		Fuel Flow	75	
		Altitude	FL 200	
	Specific Range	2.213		
	Rec'd	TAS	184	
		Fuel Flow	99	
		Altitude	FL 200	
	Specific Range	1.859		
	High Speed	TAS	194	
		Fuel Flow	138	
		Altitude	FL 200	
	Specific Range	1.406		
Ranges	Seats	Nautical Miles	354	
		Average Speed	142	
	Full	Fuel Used	204	
		Specific Range/Altitude	1.735/FL 080	
	Tanks	Nautical Miles	1,058	
		Average Speed	161	
	Full	Fuel Used	540	
		Specific Range/Altitude	1.959/FL 180	
	Missions (4 occupants)	200 nm	Runway	1,670
			Block Time	1 + 07
			Fuel Used	177
		Specific Range/Altitude	1.130/FL 200	
500 nm		Runway	1,780	
		Block Time	2 + 57	
		Fuel Used	333	
Specific Range/Altitude		1.502/FL 150		
Remarks		Suggested Base Price	\$548,700	
		Certification Basis	CAR 3, 56/97	
			Seats-full range based on five occupants.	

SINGLE-ENGINE PISTONS PRESSURIZED

Manufacturer Model		New Piper Malibu Mirage PA-46-350P		
B&CA Equipped Price		\$970,000		
Characteristics	Seating	1+4/5		
	Wing Loading	24.8		
	Power Loading	12.40		
	Noise (dBA)	74.5		
Dimensions External (ft)	Length	28.9		
	Height	11.3		
	Span	43.0		
	Internal	Length	12.4	
		Height	3.9	
		Width	4.2	
Power	Engine	Lyc TIO-540-AE2A		
	Output (hp)	350 hp		
	Inspection Interval	2,000t		
	Weights (lb)	Max Ramp	4,358	
Max Takeoff		4,340		
Max Landing		4,123		
Zero Fuel		4,123c		
EOW		3,100		
Max Payload		1,023		
Useful Load		1,258		
Max Baggage		200		
Max Fuel		720		
Available Payload w/Max Fuel		538		
Available Fuel w/Max Payload		235		
Limits		VNE	198	
	VNO	168		
	VA	133		
Airport Performance	TO (SL elev./ISA temp.)	2,090		
	TO (5,000' elev. @25°C)	2,977		
Performance	Vso	58		
	Vx	81		
	Vy	110		
	Climb	Time to Climb (min.)/Altitude	8/FL 100	
Initial Gradient (ft/nm)		703		
Ceilings (ft)	Certificated	25,000		
	Service	25,000		
Cruise	Sea-level Cabin	12,300		
	Long Range	TAS	156	
		Fuel Flow	66	
Altitude		FL 250		
Specific Range	2.364			
Rec'd	TAS	203		
	Fuel Flow	108		
	Altitude	FL 250		
Specific Range	1.880			
High Speed	TAS	212		
	Fuel Flow	120		
	Altitude	FL 250		
Specific Range	1.767			
Ranges	Seats	Nautical Miles	212	
		Average Speed	129	
	Full	Fuel Used	149	
		Specific Range/Altitude	1.423/FL 070	
	Tanks	Nautical Miles	1,370	
		Average Speed	158	
	Full	Fuel Used	670	
		Specific Range/Altitude	2.045/FL 250	
	Missions (4 occupants)	200 nm	Runway	2,090
			Block Time	1 + 06
			Fuel Used	170
		Specific Range/Altitude	1.176/FL 170	
500 nm		Runway	2,090	
		Block Time	2 + 30	
		Fuel Used	352	
Specific Range/Altitude		1.420/FL 250		
Remarks		Suggested Base Price	\$970,000	
		Certification Basis	FAR 23, 1983/88	

MULTIENGINE PISTONS NORMALLY ASPIRATED

Manufacturer Model		Vulcanair SpA P 68C P 68C	Beechcraft Baron G58		
B&CA Equipped Price		\$599,000	\$1,222,035		
Characteristics	Seating	1+5/6	1+4/5		
	Wing Loading	20.7	27.6		
	Power Loading	11.49	9.17		
	Noise (dBA)	74.7	77.6		
Dimensions External (ft)	Length	30.9	29.8		
	Height	11.2	9.8		
	Span	39.4	37.8		
	Internal	Length	13.3	12.6	
		Height	3.9	4.2	
		Width	3.8	3.5	
Power	Engines	2 Lyc IO-360-A1B6	2 Cont IO-550-C		
	Output (hp ea.)	200 hp ea.	300 hp ea.		
	Inspection Interval	2,000t	1,700t		
Weights (lb)	Max Ramp	4,630	5,524		
	Max Takeoff	4,594	5,500		
	Max Landing	4,365	5,400		
	Zero Fuel	4,167c	5,215p		
	EOW	2,910	3,880		
	Max Payload	1,257	1,335		
	Useful Load	1,720	1,644		
	Executive Payload	1,020	850		
	Max Fuel	1,063	1,164		
	Payload – Max Fuel	657	480		
	Available Fuel w/Max Payload	463	309		
	Available Fuel w/Exec. Payload	700	794		
Limits	VNE	194	223		
	VNO	154	195		
	VA	132	165		
Airport Performance	TO (SL elev./ISA temp.)	1,260	2,300		
	TO (5,000' elev. @25°C)	4,000	4,000		
	A/S (SL elev./ISA)	2,300	3,000		
	A/S (5,000' elev. @ 25°C)	4,025	4,330		
	VMCA	60	84		
	VDEC	70	85		
	VXSE	82	100		
VYSE	88	101			
Climb	Time to Climb (min.)/Altitude	12/FL 100	10/FL 100		
	Initial Engine-Out Rate (fpm)	217	390		
	Initial All-Engine Gradient (ft/nm)	920	988		
Ceilings (ft)	Certificated	—	—		
	All-Engine Service Engine-Out Service	15,000 3,800	20,688 7,284		
Cruise	Long Range	TAS	144	163	
		Fuel Flow	94	106	
	Rec'd	Altitude	FL 80	FL 120	
		Specific Range	1.532	1.538	
		TAS	155	193	
	High Speed	Fuel Flow	108	150	
		Altitude	FL 80	FL 100	
		Specific Range	1.435	1.287	
	Ranges	Exec. Payload	TAS	162	200
			Fuel Flow	116	190
Ferry		Altitude	FL 80	FL 80	
		Specific Range	1.397	1.053	
		Nautical Miles	575	993	
Missions (4 occupants)		200 nm	Average Speed	145	154
			Trip Fuel	395	711
		500 nm	Specific Range/Altitude	1.456/FL 80	1.397/FL 40
			Nautical Miles	855	1,563
Remarks		200 nm	Average Speed	145	164
	Trip Fuel		561	1,081	
	500 nm	Specific Range/Altitude	1.524/FL 80	1.446/FL 120	
		Nautical Miles	1,450	2,850	
	Missions (4 occupants)	200 nm	Block Time	1 + 28	1 + 02
			Fuel Used	140	226
		500 nm	Specific Range/Altitude	1.429/FL 80	0.885/FL 60
			Runway	1,500	2,900
	Missions (4 occupants)	200 nm	Block Time	3 + 25	2 + 31
			Fuel Used	375	531
500 nm		Specific Range/Altitude	1.333/FL 80	0.942/FL 60	
		Runway	1,500	2,900	
Remarks	Suggested Base Price	\$599,000	\$1,186,000		
	Certification Basis	FAR 23, 1976/80 Sagem glass cockpit standard.	CAR 3, 1957/69/83/05 Includes Garmin G1000.		

MULTIENGINE PISTONS TURBOCHARGED

Manufacturer Model		Vulcanair SpA P 68C-TC P 68C-TC	Piper Seneca V PA-34-220T		
B&CA Equipped Price		\$639,000	\$797,330		
Characteristics	Seating	1+5/5	1+4/5		
	Wing Loading	20.7	22.8		
	Power Loading	10.94	10.80		
	Noise (dBA)	74.7	75.6		
Dimensions External (ft)	Length	31.33	28.6		
	Height	11.2	9.9		
	Span	39.4	38.9		
	Internal	Length	10.6	10.4	
		Height	3.9	3.6	
		Width	3.8	4.8	
Power	Engines	2 Lyc TIO-360-C1A6D	2 Cont TSIO-360-RB		
	Output (hp ea.)	210 hp ea.	220 hp ea.		
	Inspection Interval	2,000t	1,800t		
Weights (lb)	Max Ramp	4,630	4,773		
	Max Takeoff	4,594	4,750		
	Max Landing	4,365	4,513		
	Zero Fuel	4,167c	4,479c		
	EOW	2,976	3,391		
	Max Payload	1,191	1,088		
	Useful Load	1,654	1,382		
	Executive Payload	1,020	850		
	Max Fuel	1,146	732		
	Payload – Max Fuel	508	650		
	Available Fuel w/Max Payload	463	294		
	Available Fuel w/Exec. Payload	634	532		
Limits	VNE	193	205		
	VNO	153	166		
	VA	126	140		
Airport Performance	TO (SL elev./ISA temp.)	1,260	1,707		
	TO (5,000' elev. @25°C)	2,200	2,435		
	A/S (SL elev./ISA)	2,300	2,510		
	A/S (5,000' elev. @ 25°C)	3,000	3,117		
	VMCA	63	66		
	VDEC	NA	73		
	VXSE	NA	83		
VYSE	NA	88			
Climb	Time to Climb (min.)/Altitude	10/FL 100	11/FL 100		
	Initial Engine-Out Rate (fpm)	240	253		
	Initial All-Engine Gradient (ft/nm)	1,400	996		
Ceilings (ft)	Certificated	20,000	25,000		
	All-Engine Service Engine-Out Service	20,000 11,500	25,000 16,500		
Cruise	Long Range	TAS	144	170	
		Fuel Flow	100	108	
	Rec'd	Altitude	FL 080	FL 230	
		Specific Range	1.440	1.574	
		TAS	155	200	
	High Speed	Fuel Flow	125	144	
		Altitude	FL 080	FL 250	
		Specific Range	1.240	1.389	
	Ranges	Exec. Payload	TAS	162	204
			Fuel Flow	150	156
Altitude			FL 080	FL 250	
Missions (4 occupants)		200 nm	Specific Range	1.080	1.308
			Nautical Miles	1,050	504
		500 nm	Average Speed	145	156
			Trip Fuel	942	408
Missions (4 occupants)		200 nm	Specific Range/Altitude	1.115/FL 080	1.235/FL 130
			Nautical Miles	1,100	865
		500 nm	Average Speed	145	159
	Trip Fuel		950	651	
Remarks	200 nm	Specific Range/Altitude	1.158/FL 080	1.329/FL 140	
		Runway	NA	1,940	
	500 nm	Block Time	1 + 28	1 + 11	
		Fuel Used	260	225	
	Missions (4 occupants)	200 nm	Specific Range/Altitude	0.769/FL 080	0.889/FL 150
			Runway	NA	2,040
		500 nm	Block Time	3 + 25	2 + 44
			Fuel Used	485	484
	Remarks	Specific Range/Altitude	1.031/FL 080	1.033/FL 210	
		Suggested Base Price	\$539,000	\$669,200	
Certification Basis		FAR 23, 1982 Data B&CA est.	FAR 23, 1971/80/97 Sagem glass c'pit.		

MULTIENGINE PISTONS PRESSURIZED

Manufacturer Model	Adam Aircraft A500 A500
B&CA Equipped Price	\$1,150,000
Characteristics	Seating 1+5/5 Wing Loading 41.2 Power Loading 10.00 Noise (dBA) 88.0
Dimensions External (ft)	Length 36.7 Height 9.5 Span 44.0
Internal	Length 13.6 Height 4.3 Width 4.5
Power	Engines 2 Cont Output (hp ea.) 350 hp ea. Inspection Interval 1,600t
Weights (lb)	Max Ramp 7,050 Max Takeoff 7,000 Max Landing 6,750 Zero Fuel 6,500c EOW 4,250 Max Payload 2,250 Useful Load 2,800 Executive Payload 1,020 Max Fuel 1,320 Payload - Max Fuel 1,480 Available Fuel w/Max Payload 550 Available Fuel w/Exec. Payload 1,780
Limits	VNE 228 Vno 166 VA 161 PSI 5.5
Airport Performance	TO (SL elev./ISA temp.) 2,471 TO (5,000' elev. @25 C) NA A/S (SL elev./ISA) NA A/S (5,000' elev. @ 25°C) NA VMCA NA VDEC 81 VXSE 90 VYSE 105
Climb	Time to Climb (min.)/Altitude 10/FL 100 Initial Engine-Out Rate (fpm) 227 Initial All-Engine Gradient (ft/nm) 912 Initial Engine-out Gradient (ft/nm) 151
Ceilings (ft)	Certificated 25,000 All-Engine Service 25,000 Engine-Out Service 16,000 Sea Level Cabin 12,400
Cruise	Long Range TAS 200 Fuel Flow 153 Altitude FL 250 Specific Range 1.307 Rec'd TAS 230 Fuel Flow 209 Altitude FL 250 Specific Range 1.100 High Speed TAS 230 Fuel Flow 209 Altitude FL 250 Specific Range 1.100
Ranges	Exec. Payload Nautical Miles 449 Average Speed 923 Trip Fuel 408 Specific Range/Altitude 1.100/FL 250 Ferry Nautical Miles 1,541 Average Speed 200 Trip Fuel 1,223 Specific Range/Altitude 1.260/FL 250
Missions (4 occupants)	200 nm Runway NA Block Time 1 + 02 Fuel Used 210 Specific Range/Altitude 0.952/FL 180 500 nm Runway NA Block Time 2 + 24 Fuel Used 483 Specific Range/Altitude 1.035/FL 250
Remarks	Suggested Base Price NA Certification Basis FAR 23 A 55 All data preliminary.

SINGLE-ENGINE TURBOPROPS

Manufacturer Model	Vulcanair Spa Mission VF-600w	Extra Aircraft EA 500
B&CA Equipped Price	\$1,300,000	\$1,345,000
Characteristics	Seating 1+9/9 Wing Loading 32.2 Power Loading 11.07 Noise (dBA) 76.8	1+5/5 30.5 10.44 79.0
Dimensions External (ft)	Length 43.0 Height 14.0 Span 50.1	33.2 11.1 38.3
Internal	Length 16.6 Height 3.7 Width 4.1	13.6 4.1 4.6
Power	Engine Waiter M601F Output (shp)/Flat Rating 777/ISA+8°C Inspection Interval 3,000t	RR 250-B17F/2 450/ISA+10°C 3,500t
Weights (lb)	Max Ramp 8,653 Max Takeoff 8,598 Max Landing 8,201 Zero Fuel 7,937c BOW 5,181 Max Payload 2,756 Useful Load 3,472 Executive Payload 1,800 Max Fuel 2,204 Available Payload w/Max Fuel 1,268 Available Fuel w/Max Payload 716 Available Fuel w/Exec. Payload 1,672	4,696 4,696 4,409 4,319c 3,186 1,133 1,510 1,000 1,032 478 377 510
Limits	Vmo 190 VA 143 Psi NA	219 158 5.5
Airport Performance	TO (SL elev./ISA temp.) 2,020 TO (5,000' elev. @25 C) NA Vso 61 Vx 95 Vy 125	1,400 1,900 61 90 100
Climb	Time to Climb (min.)/Altitude NA/FL 100 Initial Gradient (ft/nm) NA	15/FL 250 982
Ceilings (ft)	Certificated NA Service NA Sea-level Cabin —	25,000 25,000 12,300
Cruise	Long Range TAS NA Fuel Flow NA Altitude NA Specific Range NA High Speed TAS NA Fuel Flow NA Altitude NA Specific Range NA	210 107 FL 250 1.963 230 225 FL 140 1.022
NBAA IFR Ranges (100 nm alternate)	Exec. Payload (w/avail. fuel) Nautical Miles NA Average Speed NA Trip Fuel NA Specific Range/Altitude NA/NA	985 200 593 1.661/FL 250
Max Fuel (w/avail. payload)	Nautical Miles NA Average Speed NA Trip Fuel NA Specific Range/Altitude NA/NA	1,600 205 905 1.768/FL 250
Ferry	Nautical Miles NA Average Speed NA Trip Fuel NA Specific Range/Altitude NA/NA	1,625 207 905 1.796/FL 250
Missions (4 pax)	300 nm Runway NA Flight Time NA Fuel Used NA Specific Range/Altitude NA/NA	1,200 1 + 30 205 1.463/FL 250
600 nm	Runway NA Flight Time NA Fuel Used NA Specific Range/Altitude NA/NA	1,250 2 + 56 400 1.500/FL 250
1,000 nm	Runway NA Flight Time NA Fuel Used NA Specific Range/Altitude NA/NA	1,300 4 + 46 650 1.538/FL 250
Remarks	Suggested Base Price \$1,300,000 Certification Basis FAR/EASA 23 pending	\$1,345,000 FAR 23 A 55 pending

SINGLE-ENGINE TURBOPROPS

Manufacturer Model		Cessna Caravan CE-208-675	Cessna Grand Caravan CE-208B	New Piper Aircraft Meridian PA-46-500T	Socata TBM 850 TBM 700 N	Pilatus PC-12 Series 10 PC-12/47	
B&CA Equipped Price		\$1,693,400	\$1,744,125	\$1,924,730	\$2,799,850	\$3,350,000	
Characteristics	Seating	1+9/9	1+9/9	1+4/5	1+5/6	1+7/10	
	Wing Loading	28.6	31.3	27.8	39.2	37.6	
	Power Loading	11.85	12.96	10.18	10.56	8.71	
	Noise (dBA)	79.0	82.7	76.8	76.2	74.3	
Dimensions (ft)	External	Length	37.6	41.6	29.5	34.9	
		Height	14.8	15.5	11.3	14.3	14.0
		Span	52.1	52.1	43.0	41.6	53.3
	Internal	Length	12.7	16.7	12.3	15.0	16.9
		Height	4.5	4.5	3.9	4.1	4.8
		Width	5.3	5.3	4.1	4.0	5.0
Power	Engine	P&WC PT6A-114A	P&WC PT6A-114A	P&WC PT6A-42A	P&WC PT6A-66D	P&WC PT6A-67B	
	Output (shp)/Flat Rating	675/ISA+27°C	675/ISA+27°C	500/ISA+55°C	700*/ISA+49°C	1,200/ISA+36°C	
Inspection Interval		3,600t	3,600t	3,600t	3,000t	3,500t	
Weights (lb)	Max Ramp	8,035	8,785	5,134	7,430	10,495	
	Max Takeoff	8,000	8,750	5,092	7,394	10,450	
	Max Landing	7,800	8,500	4,850	7,024	9,921	
	Zero Fuel	7,467b	8,217b	4,850c	6,761b	9,039c	
	BOW	4,852	5,258	3,404	4,885	6,565	
	Max Payload	2,615	2,959	1,446	1,876	2,474	
	Useful Load	3,183	3,527	1,730	2,545	3,930	
	Executive Payload	1,800	1,800	800	1,000	1,400	
	Max Fuel	2,224	2,224	1,139	1,690	2,704	
	Available Payload w/Max Fuel	959	1,303	591	855	1,226	
	Available Fuel w/Max Payload	569	569	284	669	1,456	
	Available Fuel w/Exec. Payload	1,383	1,727	930	1,545	2,530	
Limits	V _{MO}	175	175	187	270	240	
	V _A	150	148	126	160	161	
	Psi	—	—	5.5	6.2	5.8	
Airport Performance	TO (SL elev./ISA temp.)	2,053	2,420	2,438	2,840	2,650	
	TO (5,000' elev. @25 C)	2,950	3,604	3,691	4,282	4,346	
	V _{SO}	61	61	61	65	67	
	V _X	90	72	95	100	110	
	V _Y	107	104	125	124	120	
Climb	Time to Climb (min.)/Altitude	9/FL 100	12/FL 100	19/FL 250	18/FL 250	26/FL 250	
	Initial Gradient (ft/nm)	625	465	753	750	660	
Ceilings (ft)	Certificated	25,000	25,000	30,000	31,000	30,000	
	Service	25,000	23,700	30,000	31,000	30,000	
	Sea-level Cabin	—	—	12,400	14,390	13,200	
Cruise	Long Range	TAS	154	154	178	255	
		Fuel Flow	276	291	135	260	
		Altitude	FL 100	FL 100	FL 280	FL 310	
	Specific Range	0.558	0.529	1.319	0.981		
	High Speed	TAS	186	182	257	320	
		Fuel Flow	379	379	242	446	
Altitude		FL 100	FL 100	FL 280	FL 260		
Specific Range	0.491	0.480	1.062	0.717			
NBAA IFR Ranges (100 nm alternate)	Exec. Payload (w/avail. fuel)	Nautical Miles	584	678	470	1,106	
		Average Speed	181	178	170	300	
	Specific Range/Altitude	Trip Fuel	1,238	1,545	480	1,196	
		0.472/FL 100	0.439/FL 100	0.979/FL 280	0.925/FL 310		
	Max Fuel (w/avail. payload)	Nautical Miles	866	834	960	1,396	
		Average Speed	183	179	245	255	
	Specific Range/Altitude	Trip Fuel	1,812	1,788	965	1,677	
		0.478/FL 100	0.466/FL 100	0.995/FL 280	0.832/FL 310		
	Ferry	Nautical Miles	1,131	1,070	1,100	1,396	
		Average Speed	157	158	175	255	
Trip Fuel		2,014	2,006	965	1,677		
Specific Range/Altitude		0.562/FL 120	0.533/FL 120	1.140/FL 280	0.832/FL 310		
Missions (4 pax)	300 nm	Runway	1,195	1,225	2,200	1,880	
		Flight Time	1 + 41	1 + 43	1 + 20	1 + 10	
	Specific Range/Altitude	Fuel Used	651	667	379	434	
		0.461/FL 100	0.450/FL 100	0.792/FL 280	0.691/FL 260		
	600 nm	Runway	1,468	1,498	2,400	2,100	
		Flight Time	3 + 18	3 + 22	2 + 40	2 + 01	
	Specific Range/Altitude	Fuel Used	1,265	1,295	662	1,125	
		0.474/FL 100	0.463/FL 100	0.906/FL 280	0.533/FL 260		
	1,000 nm	Runway	NP	NP	2,438*	2,450	
		Flight Time	NP	NP	4 + 04	3 + 15	
Specific Range/Altitude	Fuel Used	NP	NP	1,028	1,641		
	NP	NP	0.973/FL 280	0.609/FL 260			
Remarks	Suggested Base Price	\$1,440,000	\$1,474,000	\$1,895,000	\$2,576,930	\$2,792,000	
	Certification Basis	FAR 23, 1984/98 Utility category.	FAR 23, 1986 Utility category.	FAR 23 A 52 *1,000 nm mission flown with three passengers.	FAR 23, 1990/03/06 *850 shp max continuous with flaps retracted; RVSM.	FAR 23, 1996/05 EASA limits Max ramp weight 9,965 lb. MTOW 9,920 lb.	

MULTIENGINE TURBOPROPS 12,500 LB MTOW OR LESS

Manufacturer Model		Vulcanair SpA Viator AP68TP 600	Beechcraft King Air C90GT C90GT	Reims Cessna Caravan II RA406	Beechcraft King Air B200 B200	Piaggio Aero Industries Avanti II P180		
B&CA Equipped Price		\$1,400,000	\$2,952,010	\$3,200,000	\$5,088,610	\$6,195,000		
Characteristics	Seating	1+8/9	1+5/12	1+8/13	1+7/15	1+7/9		
	Wing Loading	33.0	34.4	38.9	41.3	67.0		
	Power Loading	10.08	9.18	9.36	7.35	7.12		
	Noise (dBA)	71.7	76.0	69.9	81.1	76.0		
Dimensions (ft)	External	Length	37.0	35.5	39.1	43.8		
		Height	11.9	14.3	13.2	14.8	13.0	
		Span	39.4	50.3	49.5	54.5	46.0	
	Internal	Length (OA/Net)	17.2/11.9	12.4/12.4	14.2/12.8	16.7/16.7	14.1/14.1	
		Height	4.1	4.8	4.3	4.8	5.8	
		Width (max)/Width (floor)	3.7/3.7	4.5/4.1	4.7/4.7	4.5/4.1	6.1/4.3	
Power	Engines	2 RR	2 P&WC	2 P&WC	2 P&WC	2 P&WC		
	Output (shp ea.)/Flat Rating	250 B17C	PT6A-135A	PT6A-112	PT6A-42	PT6A-66B		
	Inspection Interval	328/ISA+25°C	550/ISA+30°C	500/ISA+22°C	850/ISA+26°C	850/ISA+45°C		
Weights (lb)	Max Ramp	3,500t	3,600t	3,500t	3,600t	3,600*t		
	Max Takeoff	6,669	10,160	9,435	12,590	12,150		
	Max Landing	6,613	10,100	9,360	12,500	12,100		
	Zero Fuel	6,283	9,600	9,360	12,500	11,500		
	BOW	5,621c	9,212b	8,500c	11,000c	9,800c		
	Max Payload	3,704	7,150	5,732	8,655	7,800		
	Useful Load	1,917	2,062	2,768	2,345	2,000		
	Executive Payload	2,965	3,010	3,703	3,935	4,350		
	Max Fuel	1,600	1,000	1,600	1,400	1,400		
	Available Payload w/Max Fuel	1,501	2,573	3,183	3,645	2,802		
	Available Fuel w/Max Payload	1,464	437	520	290	1,548		
Limits	Available Fuel w/Exec. Payload	1,048	948	935	1,590	2,350		
	VMo	1,365	2,010	2,103	2,535	2,802		
	VA	200	226	229	260	260		
	PSI	141	169	162	182	199		
Airport Performance	TO (SL elev./ISA temp.)	—	5.0	—	6.5	9.0		
	TO (5,000' elev. @25°C)	2,034	2,392	2,964	2,579	3,262		
	A/S (SL elev./ISA temp.)	2,950	3,372	4,856	3,800	4,170		
	A/S (5,000' elev. @ 25°C)	2,887	3,382	4,363	3,411	4,250		
	VMCA	3,740	4,411	6,000	4,600	5,700		
	VDEC	79	80	90	86	99		
	VXSE	85	97	98	94	106		
	VYSE	90	100	105	115	132		
	Initial All-Engine Gradient (ft/nm)	105	108	111	121	140		
	Initial Engine-Out Gradient (ft/nm)	7/FL 100	17/FL 250	6/FL 100	16/FL 250	9/FL 250		
Climb	Time to Climb (min.)/Altitude	NA	474	320	740	756		
	Initial All-Engine Gradient (ft/nm)	700	1,953	913	1,076	1,106		
	Initial Engine-Out Gradient (ft/nm)	NA	259	173	364	324		
	Certificated	25,000	30,000	30,000	35,000	41,000		
Ceilings (ft)	All-Engine Service	25,000	30,000	30,000	35,000	41,000		
	Engine-Out Service	9,000	19,170	14,800	21,900	24,700		
	Sea-Level Cabin	—	11,065	—	15,293	24,000		
	Cruise	Long Range	TAS	169	208	180	228	311
Fuel Flow			261	332	416	378	387	
Altitude			FL 100	FL 260	FL 100	FL 290	FL 390	
Specific Range			0.648	0.627	0.433	0.603	0.804	
High Speed		TAS	214	270	231	289	392	
		Fuel Flow	375	612	617	700	781	
		Altitude	FL 100	FL 200	FL 100	FL 220	FL 280	
		Specific Range	0.571	0.441	0.374	0.413	0.502	
		NBAA IFR Ranges (100 nm alternate)	Max Nautical Miles	324	178	427	406	960
			Payload (w/avail. fuel)	170	218	179	249	309
Missions (4 pax)	300 nm	Trip Fuel	1,048	462	1,009	923	1,470	
		Specific Range/Altitude	0.309/FL 100	0.385/FL 260	0.423/FL 100	0.440/FL 330	0.653/FL 390	
		Max Fuel Nautical Miles	590	1,026	1,188	1,644	1,575	
		Average Speed	170	255	180	267	309	
	600 nm	Trip Fuel	1,100	2,074	2,767	3,024	2,170	
		Specific Range/Altitude	0.536/FL 100	0.495/FL 260	0.429/FL 100	0.544/FL 330	0.726/FL 410	
		Full Fuel Nautical Miles (w/4 pax)	620	831	1,201	1,331	1,600	
		Average Speed	170	252	180	265	301	
		Trip Fuel	1,100	1,707	2,770	2,484	2,170	
		Specific Range/Altitude	0.564/FL 100	0.487/FL 260	0.434/FL 100	0.536/FL 330	0.737/FL 410	
1,000 nm	Ferry Nautical Miles	585	1,036	1,228	1,671	1,686		
	Average Speed	170	257	176	270	306		
	Trip Fuel	1,100	2,078	2,787	3,027	2,170		
	Specific Range/Altitude	0.532/FL 100	0.499/FL 260	0.441/FL 100	0.552/FL 330	0.777/FL 410		
Remarks	300 nm	Runway	NA	3,054	3,815	3,196	2,300	
		Flight Time	1 + 45	1 + 14	1 + 21	1 + 07	0 + 53	
		Fuel Used	563	745	807	793	658	
		Specific Range/Altitude	0.533/FL 100	0.403/FL 210	0.372/FL 100	0.378/FL 250	0.456/FL 310	
	600 nm	Runway	NA	3,251	4,075	3,264	2,410	
		Block Time	3 + 35	2 + 22	2 + 39	2 + 13	1 + 44	
		Fuel Used	1,100	1,347	1,609	1,327	1,092	
		Specific Range/Altitude	0.545/FL 100	0.445/FL 230	0.373/FL 100	0.452/FL 290	0.549/FL 350	
	1,000 nm	Runway	NP	3,368	NP	3,364	2,540	
		Flight Time	NP	3 + 54*	NP	3 + 39	3 + 01	
Fuel Used		NP	2,075	NP	2,105	1,526		
Specific Range/Altitude		NP/NP	0.482/FL 250	NP/NP	0.475/FL 290	0.655/FL 390		
Remarks	Suggested Base Price	\$1,300,000	\$2,950,000	NA	\$5,073,000	\$6,195,000		
	Certification Basis	FAR 23, 1986	CAR 3, 1959/81/91	FAR 23, 1986	FAR 23, 1973/80	FAR 23, 1990		
		B&CA estimated performance data.	*Two passengers.		Pro Line 21 RVSM approved.	Includes Pro Line 21 avionics. All data preliminary.		

MULTIENGINE TURBOPROPS >12,500 LB MTOW

Manufacturer Model		Polski Zakłady Lotnicze M28 Skytruck PZL M28 05	Beechcraft King Air 350 350	
B&CA Equipped Price		\$4,750,000	\$5,970,580	
Characteristics	Seating	2+19/21	1+9/15*	
	Wing Loading	38.7	48.4	
	Power Loading	7.52	7.14	
	Noise (dBA)	81.1	72.1	
Dimensions (ft)	External			
	Length	43.2	46.7	
	Height	16.1	14.3	
	Span	72.3	57.9	
	Internal			
Length (OA/Net)	19.3/17.3	19.5/19.5		
Height	5.7	4.8		
Width (max)/Width (floor)	5.7/NA	4.5/4.1		
Power	Engines	2 P&WC PT6A-65B	2 P&WC PT6A-60A	
	Output (shp ea.)/Flat Rating	1,100/ISA+23°C	1,050/ISA+10°C	
	Inspection Interval	5,400t	3,600t	
Weights (lb)	Max Ramp	16,584	15,100	
	Max Takeoff	16,534	15,000	
	Max Landing	16,534	15,000	
	Zero Fuel	15,212c	12,500c	
	BOW	9,695	9,850	
	Max Payload	5,517	2,650	
	Useful Load	6,889	5,250	
	Executive Payload	3,800	1,800	
	Max Fuel	3,970	3,611	
	Available Payload w/Max Fuel	2,919	1,639	
	Available Fuel w/Max Payload	1,372	2,600	
Available Fuel w/Exec. Payload	3,089	3,450		
Limits	Mmo	—	—	
	Trans. Alt. FL	—	—	
	Vmo	192	260	
	Va	132	182	
	PSI	6.6	6.6	
Airport Performance	TO (SL elev., ISA temp.)	1,066	3,300	
	TO (5,000' elev. @25°C)	4,600	5,376	
	Hot/High WAT Limit	16,534	14,196	
	NBAA IFR Range	1,050	1,556	
	V2	92	109	
	VREF	73	100	
	Landing Distance	682	2,390	
Climb	Time to Climb (min.)/Altitude	7/FL 10	15/FL 250	
	*FAR 25 Initial Engine-Out Rate (fpm)	650	552	
	FAR 25 Initial Engine-Out Gradient (ft/nm)	395	304	
Ceilings (ft)	Certificated	25,000	35,000	
	All-Engine Service	30,000	35,000	
	Engine-Out Service	16,050	21,500	
	Sea-Level Cabin	—	15,293	
Cruise	Long Range	TAS	152	235
		Fuel Flow	550	362
		Altitude	FL 10	FL 330
		Specific Range	0.276	0.649
	High Speed	TAS	176	312
		Fuel Flow	720	773
		Altitude	FL 10	FL 240
		Specific Range	0.244	0.404
NBAA IFR Ranges (100 nm alternate)	Max Payload (w/avail. fuel)	Nautical Miles	205	899
		Average Speed	145	274
		Trip Fuel	650	1,897
	Specific Range/Altitude	0.315/FL 10	0.474/FL 350	
	Max Fuel (w/avail. payload)	Nautical Miles	1,050	1,489
		Average Speed	145	280
		Trip Fuel	3,250	2,951
	Specific Range/Altitude	0.323/FL 10	0.505/FL 350	
	Full Fuel (w/4 pax)	Nautical Miles	1,150	1,540
		Average Speed	145	285
Trip Fuel		3,275	2,958	
Specific Range/Altitude		0.351/FL 10	0.521/FL 350	
Ferry	Nautical Miles	1,195	1,567	
	Average Speed	145	290	
	Trip Fuel	3,275	2,964	
	Specific Range/Altitude	0.365/FL 10	0.529/FL 350	
Missions (4 pax)	300 nm	Runway	825	2,564
		Flight Time	1 + 53	1 + 02
		Fuel Used	1,400	880
		Specific Range/Altitude	0.214/FL 10	0.341/FL 250
	600 nm	Runway	875	2,679
		Flight Time	3 + 45	2 + 01
		Fuel Used	2,750	1,467
		Specific Range/Altitude	0.218/FL 10	0.409/FL 290
	1,000 nm	Runway	1,000	2,804
		Flight Time	6 + 27	3 + 26
		Fuel Used	3,000	2,098
		Specific Range/Altitude	0.333/FL 10	0.477/FL 330
Remarks	Suggested Base Price	\$4,750,000	\$5,954,000	
	Certification Basis	FAR 25 pending Chelton EFIS	FAR 23, 1989 Commuter cat.	
*FAR 23 for some Commuter Category aircraft.			*max pax requires two pilots. Pro Line 21 RVSM approved.	

JETS LESS THAN 10,000 LB MTOW

Manufacturer Model		Eclipse Aviation EA 500	Adam Aircraft A700	Cessna Citation Mustang CE-510	
B&CA Equipped Price		\$1,486,000	\$2,400,000	\$2,538,000	
Characteristics	Seating	1+4/5	1+5/7	1+5/5	
	Wing Loading	39.0	44.6	NA	
	Power Loading	3.13	3.17	NA	
	Noise (EPNdB): TO/Sideline/APR	NA/NA/NA	NA/NA/NA	NA/NA/NA	
Dimensions (ft)	External				
	Length	33.1	40.9	40.6	
	Height	11.0	9.6	13.4	
	Span	37.4	44.0	43.2	
	Internal				
Length: OA/Net	7.5/5.2	11.9/9.0	9.8/9.8		
Height	4.2	4.2	4.5		
Width: Max/Floor	4.7/3.0	4.5/NA	4.6/NA		
Baggage	Internal				
	Cu. ft/lb	26/260	NA/NA	6/98	
External	Cu. ft/lb	NA/NA	30/NA	57/620	
	Engines	2 P&WC PW610F	2 Wms Intl FJ33-4A	2 P&WC PW615F	
Power	Output (lb. ea.)/Flat Rating	900/ISA+10°C	1,200/ISA+7°C	1,350/ISA+10°C	
	Inspection Interval	3,500t	3,500t	3,500t	
Weights (lb)	Max Ramp	5,680	7,650	NA	
	Max Takeoff	5,640	7,600	NA	
	Max Landing	5,360	7,400	NA	
	Zero Fuel	4,640c	7,000c	NAc	
	BOW	3,590	4,860	NA	
	Max Payload	1,050	2,140	NA	
	Useful Load	2,090	2,790	NA	
	Executive Payload	800	1,000	1,000	
	Max Fuel	1,540	2,345	NA	
	Available Payload w/Max Fuel	550	445	600	
	Available Fuel w/Max Payload	1,040	650	NA	
	Available Fuel w/Exec. Payload	1,290	1,790	NA	
	Limits	Mmo	0.640	0.700	0.630
		Trans. Alt. FL/Wmo	FL 200/285	FL 280/260	FL 271/250
		PSI	8.3	8.5	8.3
Airport Performance	TOFL (SL elev., ISA temp.)	2,155	3,400	3,120	
	TOFL (5,000' @ 25 C)	3,698	5,488	NA	
	Hot/High Weight Limit	5,640	7,600	NA	
	NBAA IFR RANGE	934	1,255	NA	
	V2 @SL ISA, MTOW	94	102	NA	
	VREF w/4 Pax, NBAA IFR Res.	83	96	NA	
	Landing Distance w/4 Pax, NBAA IFR Res.	2,040	2,316	NA	
Climb	Time to Climb/Altitude	23/FL 370	25/FL 370	23/FL 370	
	FAR 25 Engine-Out Rate (fpm)	506	850	NA	
	FAR 25 Engine-Out Gradient (ft/nm)	323	500	NA	
Ceilings (ft)	Certificated	41,000	41,000	41,000	
	All-Engine Service	41,000	41,000	NA	
	Engine-Out Service	25,000	29,000	NA	
	Sea-Level Cabin	21,500	21,500	22,027	
Cruise	Long Range	TAS	331	357	298
		Fuel Flow	284	615	424
		Altitude	FL 410	FL 410	FL 410
		Specific Range	1.165	0.580	0.703
	High Speed	TAS	375	387	340
		Fuel Flow	472	851	633
		Altitude	FL 310	FL 350	FL 350
		Specific Range	0.794	0.455	0.537
NBAA IFR Ranges (200 nm alternate)	Max Payload (w/avail. fuel)	Nautical Miles	637	912	726
		Average Speed	306	344	300
		Trip Fuel	700	1,924	1,350
	Max Fuel (w/avail. payload)	Nautical Miles	1,280	1,333	1,158
		Average Speed	316	359	309
		Trip Fuel	1,240	2,615	2,003
	Four Pax (w/avail. fuel)	Specific Range/Altitude	1.032/FL 410	0.510/FL 410	0.578/FL 410
		Nautical Miles	934	1,231	1,002
		Average Speed	316	353	307
	Ferry	Trip Fuel	950	2,465	1,768
		Specific Range/Altitude	0.983/FL 410	0.499/FL 410	0.567/FL 410
		Nautical Miles	1,315	1,373	1,201
NBAA IFR Missions (4 pax)	300 nm	Average Speed	316	365	316
		Trip Fuel	1,240	2,641	2,028
		Specific Range/Altitude	1.060/FL 410	0.520/FL 410	0.592/FL 410
	600 nm	Runway	1,970	NA	NA
		Flight Time	0 + 54	1 + 00	0 + 58
		Fuel Used	622	623	709
	1,000 nm	Specific Range/Altitude	0.482/FL 180	0.482/FL 350	0.423/FL 350
		Runway	2,125	NA	NA
		Flight Time	1 + 43	1 + 54	1 + 55
	Remarks	Fuel Used	899	965	1,173
		Specific Range/Altitude	0.667/FL 290	0.622/FL 390	0.512/FL 390
		Runway	2,155	NA	NA
Remarks	Flight Time	2 + 55	3 + 06	3 + 16	
	Fuel Used	1,144	1,441	1,765	
	Specific Range/Altitude	0.874/FL 370	0.694/FL 410	0.567/FL 410	
Remarks		Certification Basis	FAR 23 pending; FAR 23 runway performance; 1,000-nm mission flown w/3 pax. All data preliminary.	FAR 23 pending All data preliminary.	FAR 23 pending All data preliminary.

JETS LESS THAN 20,000 LB MTOW

Manufacturer Model		Cessna CJ1+ CE-525	Cessna CJ2+ CE-525A	Beechcraft Premier IA Model 390	Cessna Citation Bravo CE-550	Sino Swearingen SJ30-2 SJ30-2	
B&CA Equipped Price		\$4,241,000	\$5,745,000	\$6,057,240	\$6,145,000	\$6,195,000	
Characteristics	Seating	1+7/7	1+8/9	1+6/7	2+7/8	1+5/6	
	Wing Loading	44.6	47.4	50.6	45.8	73.2	
	Power Loading	2.72	2.51	2.72	2.56	3.03	
	Noise (EPNdB): TO/Sideline/APR	73.5/85.2/88.5	75.5/86.1/89.7	78.3/87.9/92.0	73.7/85.2/91.2	78.5/86.2/91.8	
Dimensions (ft)	External						
	Length	42.6	47.7	46.0	47.3	46.8	
	Height	13.8	14.0	15.3	15.0	14.2	
	Span	46.9	49.8	44.5	51.7	42.3	
	Internal						
Length: OA/Net	11.0/11.0	13.6/13.6	13.5/11.2	15.8/15.8	12.5/12.5		
Height	4.8	4.8	5.4	4.8	4.4		
Width: Max/Floor	4.8/3.1	4.8/3.1	5.5/3.7	4.8/3.2	4.8/2.8		
Baggage	Internal						
	Cu. ft/lb	0/0	0/0	23/210	28/300	6/100	
	External						
Cu. ft/lb	45/725	65/1,000	54/550	45/850	53/500		
Power	Engines	2 Wms Intl FJ44-1AP	2 Wms Intl FJ44-3A-24	2 Wms Intl FJ44-2A	2 P&WC PW530A	2 Wms Intl FJ44-2A	
	Output (lb. ea.)/Flat Rating	1,965/ISA+7°C	2,490/ISA+7°C	2,300/ISA+13°C	2,887/ISA+8°C	2,300/ISA+7°C	
Weights (lb)	Inspection Interval	3,500t	4,000t	3,500t	4,000t	3,500t	
	Max Ramp	10,800	12,625	12,590	15,000	14,050	
	Max Takeoff	10,700	12,500	12,500	14,800	13,950	
	Max Landing	9,900	11,525	11,600	13,500	12,725	
	Zero Fuel	8,400c	9,700c	10,000c	11,300c	10,500c	
	BOW	6,965	7,925	8,550	9,500	8,650	
	Max Payload	1,435	1,775	1,450	1,800	1,850	
	Useful Load	3,835	4,700	4,040	5,500	5,400	
	Executive Payload	1,400	1,600	1,200	1,400	1,000	
	Max Fuel	3,220	3,930	3,670	4,824	4,850	
	Available Payload w/Max Fuel	615	770	370	676	550	
	Available Fuel w/Max Payload	2,400	2,925	2,590	3,700	3,550	
	Available Fuel w/Exec. Payload	2,435	3,100	2,840	4,100	4,400	
	Limits	Mmo	0.710	0.737	0.800	0.700	0.830
Trans. Alt. FL/Vmo		FL 305/263	FL 291/278	FL 280/320	FL 279/275	FL 295/320	
PSI		8.5	8.9	8.4	8.9	12.0	
Airport Performance	TOFL (SL elev., ISA temp.)	3,250	3,360	3,792	3,600	3,939	
	TOFL (5,000' @ 25 C)	5,890	5,180	6,888	5,520	8,784	
	Hot/High Weight Limit	10,700	12,500	12,500	14,800	13,125	
	NBAA IFR RANGE	1,195	1,597	1,178	1,508	1,915	
	V2 @SL ISA, MTOW	111	116	118	121	110	
VREF w/4 Pax, NBAA IFR Res.	101	101	112	102	100		
Landing Distance w/4 Pax, NBAA IFR Res.	2,347	2,640	2,997	2,517	2,555		
Climb	Time to Climb/Altitude	21/FL 370	15/FL 370	17/FL 370	19/FL 370	16/FL 370	
	FAR 25 Engine-Out Rate (fpm)	596	611	586	845	312	
	FAR 25 Engine-Out Gradient (ft/nm)	322	316	298	419	170	
Ceilings (ft)	Certificated	41,000	45,000	41,000	45,000	49,000	
	All-Engine Service	41,000	45,000	41,000	43,000	44,000	
	Engine-Out Service	21,200	23,800	28,000	27,750	25,800	
	Sea-Level Cabin	22,027	23,586	21,400	23,586	41,000	
Cruise	Long Range	TAS	323	356	369	342	436
		Fuel Flow	532	585	662	607	684
		Altitude	FL 410	FL 450	FL 410	FL 450	FL 450
	Specific Range	0.607	0.609	0.557	0.563	0.637	
	High Speed	TAS	384	413	451	399	475
Fuel Flow		858	1,096	1,203	1,135	1,188	
	Altitude	FL 350	FL 350	FL 330	FL 350	FL 360	
	Specific Range	0.448	0.377	0.375	0.352	0.400	
NBAA IFR Ranges (200 nm alternate)	Max Payload (w/avail. fuel)	Nautical Miles	779	995	787	907	1,445
		Average Speed	344	368	390	336	428
	Trip Fuel		1,675	2,075	1,824	2,338	2,715
		Specific Range/Altitude	0.465/FL 410	0.480/FL 450	0.431/FL 410	0.388/FL 450	0.532/FL 450
	Max Fuel (w/avail. payload)	Nautical Miles	1,300	1,613	1,360	1,614	2,503
		Average Speed	353	379	408	345	415
	Trip Fuel		2,569	3,157	2,934	3,603	4,133
		Specific Range/Altitude	0.506/FL 410	0.511/FL 450	0.464/FL 410	0.448/FL 450	0.606/FL 450
	Four Pax (w/avail. fuel)	Nautical Miles	1,173	1,574	1,131	1,495	2,220
		Average Speed	352	378	402	344	422
Trip Fuel		2,351	3,089	2,493	3,393	3,855	
	Specific Range/Altitude	0.499/FL 410	0.510/FL 450	0.454/FL 410	0.441/FL 450	0.576/FL 450	
Ferry	Nautical Miles	1,346	1,655	1,347	1,698	2,550	
	Average Speed	359	386	410	347	425	
Trip Fuel		2,604	3,187	2,893	3,633	4,195	
	Specific Range/Altitude	0.517/FL 410	0.519/FL 450	0.466/FL 410	0.467/FL 450	0.608/FL 470	
NBAA IFR Missions (4 pax)	300 nm	Runway	2,594	2,446	2,937	2,858	2,950
		Flight Time	0 + 53	0 + 49	0 + 48	0 + 53	0 + 46
	Fuel Used		847	897	898	1,086	745
		Specific Range/Altitude	0.354/FL 350	0.334/FL 370	0.334/FL 370	0.276/FL 370	0.403/FL 410
	600 nm	Runway	2,670	2,674	3,202	3,036	2,950
		Flight Time	1 + 41	1 + 35	1 + 33	1 + 42	1 + 28
	Fuel Used		1,371	1,458	1,432	1,713	1,205
		Specific Range/Altitude	0.438/FL 390	0.412/FL 410	0.419/FL 410	0.350/FL 410	0.498/FL 450
	1,000 nm	Runway	3,050	2,948	3,642	3,278	2,940
		Flight Time	2 + 51	2 + 36	2 + 30	2 + 49	2 + 22
Fuel Used		2,035	2,158	2,229	2,495	1,865	
	Specific Range/Altitude	0.491/FL 410	0.463/FL 430	0.449/FL 410	0.401/FL 430	0.536/FL 450	
Remarks	Certification Basis	FAR 23, 1992/00/05	FAR 23, 2000/05	FAR 23 A 52, 2001 BOW includes 110-lb options.	FAR 25, 1978/97	FAR 23 Commuter category All data preliminary.	

JETS LESS THAN 20,000 LB MTOW

Manufacturer Model		Cessna CJ3 CE-525B	Grob SPn Utilijet G180	Raytheon Aircraft Hawker 400XP Model 400A	Cessna Citation Encore+ CE-560	
B&CA Equipped Price		\$6,652,000	\$6,960,000	\$7,145,000	\$8,068,000	
Characteristics	Seating	2+6/8	1+8/9	2+7/9	2+7/11	
	Wing Loading	47.2	51.6	67.6	52.2	
	Power Loading	2.46	2.46	2.75	2.48	
	Noise (EPNdB): TO/Sideline/APR	74.0/88.8/88.6	NA/NA/NA	89.0/93.7/91.7	70.0/89.8/90.5	
Dimensions (ft)	External					
	Length	50.2	48.6	48.4	48.9	
	Height	15.2	16.8	13.9	15.2	
	Span	53.3	48.9	43.5	54.8	
	Internal					
Length: OA/Net	15.7/15.7	16.7/16.7	15.5/15.5	17.3/17.3		
Height	4.8	5.4	4.8	4.8		
Width: Max/Floor	4.8/3.1	5.0/4.1	4.9/3.7	4.8/3.2		
Baggage	Internal	4/100	5/100	27/410	28/655	
	External	65/1,000	37/331	26/450	43/810	
Power	Engines	2 Wms Intl FJ44-3A	2 Wms Intl FJ44-3A	2 P&WC JT15D-5	2 P&WC PW535B	
	Output (lb. ea.)/Flat Rating	2,820/ISA+7°C	2,820/ISA+11°C	2,965/ISA+12°C	3,400/ISA+12°C	
Weights (lb)	Inspection Interval	4,000t	4,000t	3,600t	5,000t	
	Max Ramp	14,070	14,000	16,500	17,030	
	Max Takeoff	13,870	13,889	16,300	16,830	
	Max Landing	12,750	13,448	15,700	15,200	
	Zero Fuel	10,510c	10,430c	13,000c	12,600c	
	BOW	8,700	7,939	10,950	10,500	
	Max Payload	1,810	2,491	2,050	2,100	
	Useful Load	5,370	6,061	5,550	6,530	
	Executive Payload	1,200	1,600	1,400	1,400	
	Max Fuel	4,710	4,575	4,912	5,400	
	Available Payload w/Max Fuel	660	1,486	638	1,130	
	Available Fuel w/Max Payload	3,560	3,570	3,500	4,430	
	Available Fuel w/Exec. Payload	4,170	4,461	4,150	5,130	
	Limits	Mmo	0.737	0.700	0.780	0.755
Trans. Alt. FL/Vmo		FL 293/278	FL 284/272	FL 260/320	FL 289/292	
PSI		8.9	8.3	9.1	8.9	
Airport Performance	TOFL (SL elev., ISA temp.)	3,180	3,000	3,906	3,590	
	TOFL (5,000' @ 25 C)	4,750	4,424	6,311	5,940	
	Hot/High Weight Limit	13,870	13,314	15,830p	16,830	
	NBAA IFR RANGE	1,761	1,967	1,197	1,694	
	V2 @SL ISA, MTOW	114	100	116	116	
VREF w/4 Pax, NBAA IFR Res.	98	87	105	99		
Landing Distance w/4 Pax, NBAA IFR Res.	2,411	2,560	2,960	2,426		
Climb	Time to Climb/Altitude	15/FL 370	13/FL 370	18/FL 370	13/FL 370	
	FAR 25 Engine-Out Rate (fpm)	800	750	305	858	
	FAR 25 Engine-Out Gradient (ft/nm)	425	450	158	444	
Ceilings (ft)	Certificated	45,000	41,000	45,000	45,000	
	All-Engine Service	45,000	41,000	43,450	45,000	
	Engine-Out Service	26,250	28,300	20,600	NA	
	Sea-Level Cabin	23,586	21,300	24,000	23,586	
Cruise	Long Range	TAS	351	364	414	376
		Fuel Flow	618	671	938	804
		Altitude	FL 450	FL 410	FL 430	FL 450
		Specific Range	0.568	0.542	0.441	0.468
	High Speed	TAS	415	407	450	426
		Fuel Flow	1,198	1,029	1,255	1,335
		Altitude	FL 350	FL 330	FL 390	FL 370
		Specific Range	0.346	0.396	0.359	0.319
NBAA IFR Ranges (200 nm alternate)	Max	1,174	1,333	750	1,152	
	Payload (w/avail. fuel)	369	352	378	372	
	Average Speed	2,576	2,849	2,133	3,039	
	Trip Fuel	0.456/FL 450	0.468/FL 410	0.352/FL 430	0.379/FL 450	
	Max Fuel (w/avail. payload)	1,875	1,897	1,433	1,652	
	Average Speed	378	355	394	381	
	Trip Fuel	3,880	3,872	3,750	4,138	
	Specific Range/Altitude	0.483/FL 450	0.490/FL 410	0.382/FL 430	0.399/FL 450	
	Four Pax (w/avail. fuel)	1,740	1,946	1,351	1,672	
	Average Speed	377	351	393	384	
	Trip Fuel	3,630	3,888	3,457	4,150	
	Specific Range/Altitude	0.479/FL 450	0.501/FL 410	0.391/FL 430	0.403/FL 450	
Ferry	Nautical Miles	1,916	2,028	1,561	1,727	
	Average Speed	381	343	393	393	
	Trip Fuel	3,900	3,903	3,786	4,190	
	Specific Range/Altitude	0.491/FL 450	0.520/FL 410	0.412/FL 450	0.412/FL 450	
	300 nm	Runway	2,606	2,192	2,904	2,890
NBAA IFR Missions (4 pax)	Flight Time	0 + 49	0 + 49	0 + 46	0 + 49	
	Fuel Used	968	784	1,098	1,076	
	Specific Range/Altitude	0.310/FL 370	0.383/FL 410	0.273/FL 370	0.279/FL 390	
	600 nm	Runway	2,612	2,265	3,154	2,956
	Flight Time	1 + 34	1 + 34	1 + 27	1 + 31	
	Fuel Used	1,569	1,386	1,859	1,830	
	Specific Range/Altitude	0.382/FL 410	0.433/FL 410	0.323/FL 410	0.328/FL 410	
	1,000 nm	Runway	2,754	2,451	3,570	3,047
	Flight Time	2 + 37	2 + 34	2 + 24	2 + 31	
	Fuel Used	2,313	2,192	2,767	2,715	
Specific Range/Altitude	0.432/FL 430	0.456/FL 410	0.361/FL 430	0.368/FL 430		
Remarks	Certification Basis	FAR 23, 2004	FAR 23 Commuter category pending	FAR 25, 1981/85	FAR 25, 1988/94/00 pending	
		Commuter category	All data preliminary.		All data preliminary.	

JETS 20,000 LB MTOW OR GREATER

Manufacturer Model	Bombardier Learjet 40XR Model 45	Cessna Citation XLS CE-560-XL	Bombardier Learjet 45XR Model 45	Bombardier Learjet 60XR Model 60	Gulfstream Aero. Gulfstream 150 G150	Raytheon Aircraft Hawker 850XP Hawker 850XP
B&CA Equipped Price	\$8,750,000	\$10,716,800	\$11,149,000	\$12,900,000	\$13,500,000	\$13,786,100
Characteristics						
Seating	2+6/7	2+9/12	2+8/9	2+7/9	2+7/8	2+8/15
Wing Loading	67.4	54.6	69.0	88.8	82.3	74.9
Power Loading	3.00	2.53	3.07	2.55	2.95	3.00
Noise (EPNdB): TO/Sideline/APR	75.5/85.1/93.4	72.7/86.3/92.8	75.5/85.1/93.4	70.8/83.2/87.7	80.7/91.2/91.9	79.3/87.1/93.3
Dimensions (ft)						
External						
Length	55.6	51.8	57.6	58.7	56.8	51.1
Height	14.1	17.2	14.1	14.6	19.1	18.1
Span	47.8	56.3	47.8	43.8	55.6	54.3
Internal						
Length (OA/Net)	17.7/17.7	18.5/18.5	19.8/19.8	17.7/15.8	17.67/17.67	21.3/21.3
Height	4.9	5.7	4.9	5.7	5.75	5.7
Width: Max/Floor	5.1/3.1	5.5/3.9	5.1/3.1	5.9/3.9	5.75/4.67	6.0/4.4
Baggage						
Internal						
Cu. ft/lb	15/170	10/100	15/170	24/350	25/TBD	50/395
External						
Cu. ft/lb	50/500	80/700	50/500	24/300	55/1,100	—/—
Power						
Engines	2 HON	2 P&WC	2 HON	2 P&WC	2 HON	2 HON
Output (lb ea.)/Flat Rating	TFE731-20BR	PW545B	TFE731-20BR	PW305A	TFE731-40AR-200G	TFE731-5BR
Inspection Interval	3,500/ISA+25°C	3,991/ISA+13°C	3,500/ISA+25°C	4,600/ISA+17°C	4,420/ISA+13°C	4,660/ISA+10°C
Weights (lb)						
Max Ramp	5,000c	5,000t	5,000c	5,000c	5,000c	4,200c
Max Takeoff	21,250	20,400	21,750	23,750	26,250	28,120
Max Landing	21,000	20,200	21,500	23,500	26,100	28,000
Zero Fuel	19,200	18,700	19,200	19,500	21,700	23,350
BOW	16,000c	15,100c	16,000c	17,000c	17,500c	18,450c
Max Payload	13,715	12,800	13,890	14,985	15,100	16,330
Useful Load	2,285	2,300	2,110	2,015	2,400	2,120
Executive Payload	7,535	7,600	7,860	8,765	11,150	11,790
Max Fuel	1,200	1,800	1,600	1,400	1,400	1,600
Available Payload w/Max Fuel	5,375	6,740	6,062	7,910	10,300	10,000
Available Fuel w/Max Payload	2,160	860	1,798	855	850	1,790
Available Fuel w/Exec. Payload	5,250	5,300	5,750	6,750	8,750	9,670
Mmo	5,375	5,800	6,062	7,365	9,750	10,000
Limits						
Trans. Alt. FL/Vmo	0.810	0.750	0.810	0.810	0.850	0.800
PSI	FL 270/330	FL 265/305	FL 270/330	FL 270/330	FL 293/330	FL 290/310
TOFL (SL elev., ISA temp.)	9.4	9.3	9.4	9.4	8.8	8.6
Airport Performance						
TOFL (5,000' @25°C)	4,680	3,560	5,040	5,450	5,012	5,032
Hot/High Weight Limit	5,090	5,490	5,650	8,520	8,120	7,952
NBAA IFR Range	19,760	20,200	20,662	23,371p	26,100	27,049
V ₂ @ SL ISA, MTOW	1,617	1,742	1,869	2,228	2,977	2,676
VREF w/4 Pax, NBAA IFR Res.	123	118	130	147	131	140
Landing Distance w/4 Pax, NBAA IFR Res.	112	106	113	131	115	113
Climb						
Time to Climb/Altitude	2,334	2,739	2,349	3,061	2,428	2,245
FAR 25 Engine-Out Rate (fpm)	15/FL 370	15/FL 370	15/FL 370	13/FL 370	17/FL 370	19/FL 370
FAR 25 Engine-Out Gradient (ft/nm)	389	765	585	715	606	354
Certificated	190	389	270	292	278	152
Ceilings (ft)						
All-Engine Service	51,000	45,000	51,000	51,000	45,000	41,000
Engine-Out Service	45,200	45,000	44,700	42,400	TBD	39,000
Sea-Level Cabin	28,400	28,600	27,900	24,500	TBD	18,800
Cruise						
Long Range						
TAS	433	354	436	423	430	402
Fuel Flow	950	862	982	1,134	1,187	1,168
Altitude	FL 470	FL 450	FL 470	FL 430	FL 430	FL 390
Specific Range	0.456	0.411	0.444	0.373	0.362	0.344
High Speed						
TAS	453	431	450	446	470	448
Fuel Flow	1,079	1,235	1,074	1,297	1,735	1,826
Altitude	FL 470	FL 410	FL 470	FL 430	FL 370	FL 370
Specific Range	0.420	0.349	0.419	0.344	0.271	0.245
NBAA IFR Ranges (200 nm alternate)						
Max Payload (w/avail. fuel)						
Nautical Miles	1,367	1,130	1,557	1,742	2,276	2,394
Average Speed	421	387	423	413	420	390
Trip Fuel	3,754	3,607	4,254	5,261	7,294	7,959
Specific Range/Altitude	0.364/FL 470	0.313/FL 450	0.366/FL 450	0.331/FL 410	0.312/FL 430	0.301/FL 410
Max Fuel (w/avail. payload)						
Nautical Miles	1,484	1,724	1,764	2,289	2,943	2,522
Average Speed	422	396	424	415	422	391
Trip Fuel	4,014	5,180	4,712	6,596	8,939	8,345
Specific Range/Altitude	0.370/FL 470	0.333/FL 450	0.374/FL 470	0.347/FL 410	0.329/FL 450	0.302/FL 410
Four Pax (w/avail. fuel)						
Nautical Miles	1,617	1,722	1,869	2,269	2,950	2,642
Average Speed	422	396	423	415	422	391
Trip Fuel	4,087	5,175	4,764	6,548	8,942	8,395
Specific Range/Altitude	0.396/FL 470	0.333/FL 450	0.392/FL 470	0.347/FL 410	0.330/FL 450	0.315/FL 410
Ferry						
Nautical Miles	1,710	1,769	1,971	2,389	3,071	2,698
Average Speed	424	402	426	413	422	393
Trip Fuel	4,134	5,219	4,811	6,642	8,991	8,434
Specific Range/Altitude	0.414/FL 490	0.339/FL 450	0.410/FL 490	0.360/FL 410	0.342/FL 450	0.320/FL 390
Missions (4 pax)						
300 nm						
Runway	3,382	2,775	3,405	3,360	3,590	3,763
Flight Time	0 + 44	0 + 46	0 + 44	0 + 44	0 + 49	0 + 48
Fuel Used	1,201	1,245	1,206	1,194	1,227	1,472
Specific Range/Altitude	0.250/FL 390	0.241/FL 390	0.249/FL 390	0.251/FL 390	0.244/FL 450	0.204/FL 370
600 nm						
Runway	3,537	2,784	3,568	3,590	3,757	3,852
Flight Time	1 + 23	1 + 29	1 + 23	1 + 25	1 + 30	1 + 28
Fuel Used	1,966	2,094	1,977	1,940	1,977	2,720
Specific Range/Altitude	0.305/FL 430	0.287/FL 410	0.303/FL 430	0.309/FL 430	0.303/FL 450	0.221/FL 370
1,000 nm						
Runway	3,722	3,021	3,739	3,985	3,949	3,974
Flight Time	2 + 15	2 + 26	2 + 15	2 + 19	2 + 27	2 + 22
Fuel Used	3,101	3,210	3,123	3,083	3,014	4,387
Specific Range/Altitude	0.322/FL 430	0.312/FL 430	0.320/FL 430	0.324/FL 430	0.332/FL 450	0.228/FL 370
Remarks						
Certification Basis	FAR 25 A 77 JAR 25 A 13, 1997/03 incorporates SB 40-11-1	FAR 25, 1998/04 RE100 APU standard.	FAR 25 A 77 JAR 25 A 13	FAR 25, 1981/92 FAR 25 pending Pro Line 21 std.	FAR 25 A108, 2005	CAR 4b, 1963; FAR 25 Amend 1984/95/06 Pro Line 21 std. 36-150 APU.

JETS 20,000 LB MTOW OR GREATER

Manufacturer Model		Cessna Citation Sovereign CE-680	Embraer Legacy Shuttle EMB-135LR	Bombardier Challenger 300 BD-100-1A10	Raytheon Aircraft Hawker 4000 Model 4000	Cessna Citation X CE-750	Dassault Falcon 50EX DA50
B&CA Equipped Price		\$15,479,000	\$17,800,000	\$19,210,000	\$19,557,000	\$20,062,000	\$21,150,000
Characteristics	Seating	2+9/12	2+16/37	2+8/13	2+8/14	2+8/11	2+9/19
	Wing Loading	58.2	80.0	74.4	70.6	68.5	79.8
	Power Loading	2.63	3.12	2.85	2.72	2.67	3.58
Noise (EPNdB): TO/Sideline/APR		71.5/87.6/91.3	79.7/84.5/92.3	75.3/87.6/89.6	NA/NA/NA	73.2/83.8/90.3	83.8/95.2/93.1
Dimensions (ft)	External						
	Length	63.5	86.4	68.6	69.2	72.3	60.8
	Height	20.3	22.2	20.0	19.6	19.3	22.9
	Span	63.3	65.8	63.8	61.8	63.9	61.8
	Internal						
	Length (OA/Net)	25.3/25.3	53.4/42.4	28.6/16.5	29.5/25.0	23.9/23.9	28.0/23.5
Baggage	Height	5.7	6.0	6.1	6.0	5.7	5.9
	Width: Max/Floor	5.5/3.9	6.9/5.2	7.2/5.1	6.5/4.0	5.5/3.9	6.1/5.2
	Cu. ft/lb	35/415	42/551	106/750	115/NA	variable/variable	—/—
Power	External						
	Cu. ft/lb	100/1,000	325/2,205	—/—	—/—	82/775	115/2,200
Weights (lb)	Engines	2 P&WC PW306C	2 RR AE 3007 A1/3	2 HON HTF 7000	2 P&WC PW308A	2 RR AE3007C1	3 HON TFE731-40
	Output (lb ea.)/Flat Rating	5,770/ISA+18°C	7,057/ISA+30°C	6,826/ISA+15°C	6,900/ISA+20°C	6,764/ISA+15°C	3,700/ISA+17°C
	Inspection Interval	6,000t	OC	OC	6,000t	4,500*t	6,000c
Limits	Max Ramp	30,550	44,312	39,000	37,700	36,400	39,900
	Max Takeoff	30,300	44,092	38,850	37,500	36,100	39,700
	Max Landing	27,100	40,785	33,750	33,500	31,800	35,715
	Zero Fuel	20,450c	35,274c	27,000c	25,000c	24,400c	25,570c
	BOW	18,150	25,353	23,500	22,475	22,250	22,250
	Max Payload	2,300	9,921	3,500	2,525	2,300	3,320
	Useful Load	12,400	18,959	15,500	15,225	14,300	17,650
	Executive Payload	1,800	3,200	1,600	1,600	1,600	1,800
	Max Fuel	11,216	11,321	14,045	14,600	12,931	15,520
	Available Payload w/Max Fuel	1,184	7,638	1,455	625	1,369	2,130
	Available Fuel w/Max Payload	10,100	9,038	12,000	12,700	12,000	14,330
	Available Fuel w/Exec. Payload	10,600	11,321	13,900	13,625	12,700	15,520
Airport Performance	Mmo	0.800	0.780	0.830	0.840	0.920	0.860
	Trans. Alt. FL/Vmo	FL 298/305	FL 276/320	FL 290/320	FL 200/350	FL 307/350	FL 240/370
	PSI	9.3	7.8	8.8	9.6	9.3	9.2
Climb	TOFL (SL elev., ISA temp.)	3,640	5,600	4,720	4,509	5,140	4,935
	TOFL (5,000' @25°C)	4,950	7,024	6,860	6,720	7,350	7,247
	Hot/High Weight Limit	30,000	44,092	38,345	37,500	34,980p	38,570
	NBAA IFR Range	2,903	2,049	3,276	3,362	2,980	3,382
	V ₂ @ SL ISA, MTOW	115	129	130	134	137	123
	VREF w/4 Pax, NBAA IFR Res.	95	106	113	107	112	106
	Landing Distance w/4 Pax, NBAA IFR Res.	2,202	2,057	2,290	2,490	2,730	2,159
	Time to Climb/Altitude	14/FL 370	22/FL 370	14/FL 370	13/FL 370	18/FL 370	17/FL 370
Ceiling (ft)	FAR 25 Engine-Out Rate (fpm)	617	301	473	602	486	671
	FAR 25 Engine-Out Gradient (ft/nm)	322	140	219	270	213	322
Cruise	Certificated	47,000	37,000	45,000	45,000	51,000	49,000
	All-Engine Service	43,000	37,000	44,000	42,900	43,000	41,900
	Engine-Out Service	27,560	22,331	27,800	28,000	26,000	31,900
	Sea-Level Cabin	25,230	19,493	23,500	25,240	25,230	23,000
NBAA IFR Ranges (200 nm alternate)	Long Range						
	TAS	387	424	459	430	470	417
	Fuel Flow	1,133	1,931	1,577	1,453	1,529	1,586
	Altitude	FL 470	FL 370	FL 450	FL 450	FL 470	FL 430
	Specific Range	0.342	0.220	0.291	0.296	0.307	0.263
	High Speed						
TAS	446	446	470	470	513	481	
Fuel Flow	1,738	2,122	1,794	1,790	2,229	2,533	
Altitude	FL 390	FL 370	FL 430	FL 410	FL 410	FL 390	
Specific Range	0.257	0.210	0.262	0.263	0.230	0.190	
Ferry	Max Payload (w/avail. fuel)						
	Nautical Miles	2,405	1,167	2,544	2,775	2,703	2,868
	Average Speed	404	393	446	422	462	410
	Trip Fuel	8,327	6,662	9,935	10,727	9,973	12,308
	Specific Range/Altitude	0.289/FL 470	0.175/FL 370	0.256/FL 450	0.259/FL 450	0.271/FL 470	0.233/FL 450
	Max Fuel (w/avail. payload)						
	Nautical Miles	2,847	1,658	3,291	3,400	3,070	3,249
	Average Speed	406	402	449	422	462	410
	Trip Fuel	9,564	9,039	12,220	12,683	11,055	13,590
	Specific Range/Altitude	0.298/FL 470	0.183/FL 370	0.269/FL 450	0.268/FL 450	0.278/FL 490	0.239/FL 470
Missions (4 pax)	300 nm						
	Nautical Miles	2,881	1,893	3,291	3,341	3,125	3,350
	Average Speed	406	407	449	423	463	411
	Trip Fuel	9,576	9,436	12,220	12,503	11,078	13,590
Specific Range/Altitude	0.301/FL 470	0.201/FL 370	0.269/FL 450	0.267/FL 450	0.282/FL 490	0.247/FL 470	
Remarks	600 nm						
	Nautical Miles	2,960	1,918	3,335	3,466	3,221	3,428
	Average Speed	407	408	451	423	463	412
	Trip Fuel	9,608	9,469	12,231	12,701	11,118	13,590
	Specific Range/Altitude	0.308/FL 470	0.203/FL 370	0.273/FL 450	0.273/FL 450	0.290/FL 490	0.252/FL 470
	1,000 nm						
	Nautical Miles	3,058	3,458	3,370	2,639	3,536	2,853
	Flight Time	0 + 45	0 + 53	0 + 47	0 + 48	0 + 41	0 + 47
Fuel Used	1,488	1,916	1,570	1,520	1,837	1,607	
Specific Range/Altitude	0.202/FL 390	0.157/FL 370	0.191/FL 450	0.197/FL 450	0.163/FL 370	0.187/FL 450	
Remarks	600 nm						
	Nautical Miles	3,068	3,468	3,399	2,695	3,580	2,959
	Average Speed	1 + 27	1 + 35	1 + 26	1 + 26	1 + 16	1 + 27
	Trip Fuel	2,399	3,288	2,554	2,542	2,855	2,705
	Specific Range/Altitude	0.250/FL 430	0.182/FL 370	0.235/FL 450	0.236/FL 450	0.210/FL 430	0.222/FL 450
	1,000 nm						
Nautical Miles	3,093	3,497	3,472	2,847	3,672	3,005	
Flight Time	2 + 22	2 + 32	2 + 18	2 + 17	2 + 03	2 + 21	
Fuel Used	3,750	5,147	3,889	3,940	4,469	4,232	
Specific Range/Altitude	0.267/FL 430	0.194/FL 370	0.257/FL 450	0.254/FL 450	0.224/FL 430	0.236/FL 450	
Remarks	Certification Basis	FAR 25, 2004; JAR 25, 2005	RBHA/FAR/JAR 25, 1999	FAR 25 A 98 and JAR 25 Chg 15	FAR/JAR 25 2005	FAR 25, 1996/02 JAR 25, 1999/02	FAR 25, 1977/79/96
			Equipment level exceeds B&CA MEL.			*Engine flight hour inspection.	Optional 40,780-lb MTOW.

JETS 20,000 LB MTOW OR GREATER

Manufacturer Model	Gulfstream Aero. Gulfstream 200 G200	Embraer Legacy Executive EMB-135BJ	Bombardier Challenger 850 CS CL-600-2B19	Dassault Falcon 2000DX DA2000EX	Bombardier Challenger 605	Dassault Falcon 2000EX DA2000EX
B&CA Equipped Price	\$21,646,000	\$23,600,000	\$24,530,000	\$25,550,000	\$26,714,000	\$27,200,000
Characteristics	Seating 2+10/18 Wing Loading 96.1 Power Loading 2.93	2+13/16 90.0 3.11	2+27/50 94.6 3.04	2+8/19 78.3 2.93	2+9/19 97.9 2.76	2+8/19 78.3 3.01
Noise (EPNdB): TO/Sideline/APR	81.7/85.8/92.7	79.7/86.8/91.3	78.6/82.4/92.1	79.5/91.7/91.0	81.2/86.2/90.3	80.7/91.7/91.0
Dimensions (ft)	External Length 62.3 Height 21.4 Span 58.1	86.4 22.2 68.9	87.8 20.4 69.6	66.3 23.2 63.4	68.4 20.7 64.3	66.3 23.2 63.4
Internal Length (OA/Net) 24.4/24.4 Height 6.3 Width: Max/Floor 7.2/5.7	49.8/42.4 6.0 6.9/5.2	48.4/43.3 6.1 8.2/7.2	31.2/26.3 6.2 7.7/6.3	28.4/25.5 6.1 8.2/7.2	31.2/26.3 6.2 7.7/6.3	
Baggage	Internal Cu. ft/lb 25/367 External Cu. ft/lb 125/1,980	240/1,000 —/—	296/2,700 —/—	131/1,600 —/—	115/900 —/—	131/1,600 —/—
Power	Engines 2 P&WC PW306A Output (lb ea.)/Flat Rating 6,040/ISA+17°C Inspection Interval 6,000c	2 RR AE 3007 A1E OC 6,000c	2 GE CF34-3B1 OC 7,000c	2 P&WC PW308C 7,000/ISA+15°C	2 GE CF34-3B OC 7,000c	2 P&WC PW308C 7,000/ISA+15°C
Weights (lb)	Max Ramp 35,600 Max Takeoff 35,450 Max Landing 30,000 Zero Fuel 24,000c	49,758 49,604 40,785 35,274c	53,250 53,000 47,000 44,000c	41,200 41,000 39,300 29,700c	48,300 48,200 38,000 32,000c	42,400 42,200 39,300 29,700c
BOW 20,200 Max Payload 3,800 Useful Load 15,400 Executive Payload 2,000 Max Fuel 15,000 Available Payload w/Max Fuel 400 Available Fuel w/Max Payload 11,600 Available Fuel w/Exec. Payload 13,400	30,148 5,126 19,610 2,600 18,170 1,440 14,484 17,010	32,257 11,743 20,993 5,400 14,305 6,688 9,250 14,305	26,000 5,700 17,200 1,600 14,600 2,600 11,500 14,600	26,985 5,015 21,315 1,800 19,850 1,465 16,300 19,515	24,000 5,700 18,400 1,600 16,660 1,740 12,700 16,660	
Limits	Mmo 0.850 Trans. Alt. FL/Vmo 245/360 PSI 8.8	0.800 FL 276/320 8.4	0.850 FL 254/335 8.3	0.860 FL 250/370 9.3	0.850 FL 222/348 9.2	0.860 FL 250/370 9.3
Airport Performance	TOFL (SL elev., ISA temp.) 6,083 TOFL (5,000' @25°C) 8,804 Hot/High Weight Limit 33,255p NBAA IFR Range 2,845 V ₂ @ SL ISA, MTOW 150 VREF w/4 Pax, NBAA IFR Res. 121 Landing Distance w/4 Pax, NBAA IFR Res. 2,590	5,453 7,385 49,119 3,432 139 113 2,306	6,305 7,433 47,112 2,477 146 122 2,366	5,300 7,535 39,283 3,458 135 113 2,640	5,684 9,123 47,535 4,035 147 117 2,364	5,585 8,120 41,343 3,944 136 113 2,640
Climb	Time to Climb/Altitude 19/FL 370 FAR 25 Engine-Out Rate (fpm) 395 FAR 25 Engine-Out Gradient (ft/nm) 158	21/FL 370 619 267	26/FL 370 572 235	15/FL 370 643 286	21/FL 370 680 278	16/FL 370 643 286
Ceilings (ft)	Certificated 45,000 All-Engine Service 39,612 Engine-Out Service 23,720 Sea-Level Cabin 23,000	41,000 39,800 23,548 21,653	41,000 37,760 19,370 21,100	47,000 43,000 NA 25,300	41,000 38,250 20,000 23,200	47,000 43,000 NA 25,300
Cruise	Long Range TAS 430 Fuel Flow 1,555 Altitude FL 410 Specific Range 0.277	424 1,874 FL 410 0.226	426 1,826 FL 410 0.233	418 1,441 FL 430 0.290	437 1,891 FL 410 0.231	422 1,496 FL 430 0.282
High Speed	TAS 470 Fuel Flow 2,065 Altitude FL 370 Specific Range 0.228	447 2,240 FL 390 0.200	460 2,170 FL 390 0.212	482 2,306 FL 390 0.209	470 2,437 FL 370 0.193	482 2,351 FL 390 0.205
NBAA IFR Ranges (200 nm alternate)	Max Payload (w/avail. fuel) Nautical Miles 2,371 Average Speed 421 Trip Fuel 9,851 Specific Range/Altitude 0.241/FL 410	2,450 413 12,300 0.199/FL 410	1,116 402 6,759 0.165/FL 370	2,311 416 9,567 0.242/FL 450	3,010 416 14,255 0.211/FL 410	2,579 418 10,767 0.240/FL 450
Max Fuel (w/avail. payload)	Nautical Miles 3,444 Average Speed 423 Trip Fuel 13,388 Specific Range/Altitude 0.257/FL 430	3,361 419 16,116 0.209/FL 410	2,186 413 11,998 0.182/FL 390	3,270 419 12,750 0.256/FL 470	3,975 419 17,938 0.222/FL 410	3,823 419 14,810 0.258/FL 470
Four Pax (w/avail. fuel)	Nautical Miles 3,312 Average Speed 423 Trip Fuel 12,974 Specific Range/Altitude 0.255/FL 410	3,403 419 16,138 0.211/FL 410	2,477 415 12,213 0.203/FL 410	3,425 419 12,750 0.269/FL 470	4,035 419 17,962 0.225/FL 410	3,912 419 14,810 0.264/FL 470
Ferry	Nautical Miles 3,493 Average Speed 423 Trip Fuel 13,401 Specific Range/Altitude 0.261/FL 430	3,455 419 16,167 0.214/FL 410	2,521 415 12,242 0.206/FL 410	3,508 418 12,750 0.275/FL 470	4,109 419 17,992 0.228/FL 410	4,000 419 14,810 0.270/FL 470
Missions (4 pax)	300 nm Runway 3,850 Flight Time 0 + 48 Fuel Used 1,361 Specific Range/Altitude 0.220/FL 430	3,455 0 + 53 1,944 0.154/FL 410	3,059 0 + 49 2,062 0.145/FL 410	3,200 0 + 48 1,527 0.196/FL 450	3,384 0 + 47 1,589 0.189/FL 410	3,200 0 + 48 1,527 0.196/FL 450
600 nm	Runway 3,900 Flight Time 1 + 30 Fuel Used 2,340 Specific Range/Altitude 0.256/FL 430	3,497 1 + 35 3,225 0.186/FL 410	3,285 1 + 30 3,386 0.177/FL 410	3,223 1 + 27 2,498 0.240/FL 450	3,412 1 + 27 2,823 0.213/FL 410	3,223 1 + 27 2,498 0.240/FL 450
1,000 nm	Runway 3,965 Flight Time 2 + 26 Fuel Used 3,695 Specific Range/Altitude 0.271/FL 430	3,560 2 + 29 5,056 0.198/FL 410	3,597 2 + 25 5,196 0.192/FL 410	3,367 2 + 21 3,836 0.261/FL 450	3,468 2 + 19 4,510 0.222/FL 410	3,367 2 + 21 3,836 0.261/FL 450
Remarks	Certification Basis FAR 25 A82, 1998 Optional 35,600-lb MTOW.	RBHA/FAR/JAR 25, 1999 equipment level exceeds B&CA MEL.	FAR/JAR 25, 1992 Corporate shuttle; baggage volume is flexible. Opt'l ISA+15°C engine flat rating.	FAR/EASA 25 pending All data preliminary.	FAR 25, 1980/83/87/95 pending	FAR 25, 2003

JETS 20,000 LB MTOW OR GREATER

Manufacturer Model	Bombardier Challenger 850 ER CL-600-2B19	Gulfstream Aero. Gulfstream 350 GIV-X	Bombardier Challenger 870 CS CL-600-2C10	Dassault Falcon 900DX DA900EX	Bombardier Challenger 890 CS CL-600-2D24	Gulfstream Aero. Gulfstream 450 GIV-X	
B&CA Equipped Price	\$28,950,000	\$29,500,000	\$29,650,000	\$32,750,000	\$33,950,000	\$34,170,000	
Characteristics	Seating 2+15/19 Wing Loading 94.6 Power Loading 3.04	2+14/19 74.6 2.56	4+42/70 101.5 2.96	2+12/19 88.5 3.11	4+52/90 114.4 3.22	2+14/19 77.8 2.67	
Noise (EPNdB): TO/Sideline/APR	78.6/82.2/92.1	74.1/89.7/92.3	82.7/89.4/92.6	79.7/90.5/92.3	83.4/89.4/92.6	75.8/89.5/92.5	
Dimensions (ft)	External Length 87.8 Height 20.4 Span 69.6	89.3 25.2 77.8	106.1 24.8 76.3	66.3 24.8 63.4	118.9 24.8 81.6	89.3 25.2 77.8	
Internal Length (OA/Net)	48.4/40.2	45.1/37.0	68.1/59.2	39.0/33.2	80.9/71.8	45.1/37.0	
Height	6.1	6.2	6.2	6.2	6.2	6.2	
Width: Max/Floor	8.2/7.2	7.3/5.5	8.3/7.2	7.7/6.3	8.3/7.2	7.3/5.5	
Baggage	Internal Cu. ft/lb 202/900	169/2,000	439/4,305	127/2,866	486/5,005	169/2,000	
External Cu. ft/lb	—/—	—/—	—/—	—/—	—/—	—/—	
Power	Engines 2 GE CF34-3B1	2 RR Tay Mk 611-8C	2 GE CF34-8C5	3 HON TFE731-60	2 GE CF34-8C5	2 RR Tay Mk 611-8C	
Output (lb ea.)/Flat Rating	8,729/ISA+8°C	13,850/ISA+15°C	12,670/ISA+15°C	5,000/ISA+17°C	13,123/ISA+15°C	13,850/ISA+15°C	
Inspection Interval	OC	12,000 or OC	OC	6,000c	OC	12,000c or OC	
Weights (lb)	Max Ramp 53,250	71,300	75,250	46,900	85,000	74,300	
Max Takeoff	53,000	70,900	75,000	46,700	84,500	73,900	
Max Landing	47,000	66,000	67,000	42,200	75,000	66,000	
Zero Fuel	44,000c	49,000c	62,300c	30,865c	70,600c	49,000c	
BOW	34,167	42,700	44,907	25,800	48,262	43,000	
Max Payload	9,833	6,300	17,393	5,065	22,338	6,000	
Useful Load	19,083	28,600	30,343	21,100	36,738	31,300	
Executive Payload	3,000	2,800	8,400	2,400	10,400	2,800	
Max Fuel	18,305	25,807	19,450	18,830	19,450	29,281	
Available Payload w/Max Fuel	778	2,793	10,893	2,270	17,288	2,019	
Available Fuel w/Max Payload	9,250	22,300	12,950	16,035	14,400	25,300	
Available Fuel w/Exec. Payload	16,083	25,800	19,450	18,700	19,450	28,500	
Limits	Mmo 0.850	0.880	0.850	0.870	0.850	0.880	
Trans. Alt. FL/Vmo	FL 254/335	FL 280/340	FL 254/335	FL 250/370	FL 254/335	FL 280/340	
PSI	8.3	9.6	8.6	9.3	8.6	9.6	
Airport Performance	TOFL (SL elev., ISA temp.) 6,305	5,050	5,562	4,890	6,808	5,450	
TOFL (5,000' @25°C)	11,344	7,212	6,267	6,910	6,465	7,886	
Hot/High Weight Limit	53,000p	70,900	64,907	45,430	68,262	73,900	
NBAA IFR Range	3,091	3,890	2,502	4,088	2,356	4,385	
V ₂ @ SL ISA, MTOW	146	146	138	131	150	149	
VREF w/4 Pax, NBAA IFR Res.	125	122	125	109	121	122	
Landing Distance w/4 Pax, NBAA IFR Res.	2,458	2,640	4,462	2,397	4,511	2,650	
Climb	Time to Climb/Altitude 29/FL 370	15/FL 370	18/FL 370	17/FL 370	26/FL 370	16/FL 370	
FAR 25 Engine-Out Rate (fpm)	501	790	425	796	410	712	
FAR 25 Engine-Out Gradient (ft/nm)	206	323	185	365	164	285	
Ceilings (ft)	Certificated 41,000	45,000	41,000	51,000	41,000	45,000	
All-Engine Service	37,760	43,200	38,100	40,600	37,800	42,400	
Engine-Out Service	19,370	26,000	21,400	31,600	18,100	25,000	
Sea-Level Cabin	21,100	26,700	21,100	25,300	21,100	26,700	
Cruise	Long Range	High Speed	TAS 426	459	447	435	447
Fuel Flow	1,968	2,510	2,661	1,738	2,819	2,585	
Altitude	FL 410	FL 450	FL 410	FL 430	FL 410	FL 450	
Specific Range	0.216	0.183	0.168	0.250	0.159	0.178	
High Speed	TAS 459	476	471	474	471	476	
Fuel Flow	2,187	2,969	2,886	2,198	3,152	3,055	
Altitude	FL 410	FL 410	FL 410	FL 390	FL 410	FL 410	
Specific Range	0.210	0.160	0.163	0.216	0.149	0.156	
NBAA IFR Ranges (200 nm alternate)	Max Payload	Average Speed	Trip Fuel	Specific Range/Altitude	Max Fuel	Average Speed	Trip Fuel
Nautical Miles	1,116	3,008	1,138	3,405	1,118	3,463	
Average Speed	402	450	418	421	418	452	
Trip Fuel	6,759	19,097	9,270	15,530	10,089	22,097	
Specific Range/Altitude	0.165/FL 370	0.158/FL 450	0.123/FL 390	0.219/FL 450	0.111/FL 370	0.157/FL 450	
Max Fuel	Nautical Miles 3,096	3,726	2,157	3,912	1,823	4,281	
Average Speed	416	453	432	421	428	453	
Trip Fuel	16,143	22,763	16,017	16,810	15,340	26,259	
Specific Range/Altitude	0.192/FL 390	0.164/FL 450	0.135/FL 390	0.233/FL 470	0.119/FL 390	0.163/FL 450	
Four Pax	Nautical Miles 3,091	3,848	2,503	4,057	2,356	4,363	
Average Speed	416	453	435	422	435	453	
Trip Fuel	16,120	22,855	16,366	16,810	16,200	26,315	
Specific Range/Altitude	0.192/FL 390	0.168/FL 450	0.153/FL 410	0.241/FL 470	0.145/FL 410	0.166/FL 450	
Ferry	Nautical Miles 3,141	3,898	2,528	4,143	2,381	4,419	
Average Speed	417	453	435	422	435	453	
Trip Fuel	16,172	22,891	16,392	16,810	16,228	26,351	
Specific Range/Altitude	0.194/FL 390	0.170/FL 450	0.154/FL 410	0.246/FL 470	0.147/FL 410	0.168/FL 450	
Missions (4 pax)	300 nm	600 nm	1,000 nm	Runway	Flight Time	Fuel Used	Specific Range/Altitude
Runway	3,430	3,207	3,704	2,700	4,196	3,214	
Flight Time	0 + 50	0 + 46	0 + 48	0 + 47	0 + 48	0 + 46	
Fuel Used	2,103	2,595	2,683	1,607	2,822	2,603	
Specific Range/Altitude	0.143/FL 410	0.116/FL 450	0.112/FL 410	0.187/FL 450	0.106/FL 410	0.115/FL 450	
600 nm	Runway 3,643	3,240	3,744	2,782	4,196	3,248	
Flight Time	1 + 31	1 + 25	1 + 29	1 + 27	1 + 29	1 + 25	
Fuel Used	3,480	4,102	4,450	2,675	4,668	4,116	
Specific Range/Altitude	0.172/FL 410	0.146/FL 450	0.135/FL 410	0.224/FL 450	0.129/FL 410	0.146/FL 450	
1,000 nm	Runway 3,975	3,287	3,800	2,795	4,196	3,294	
Flight Time	2 + 25	2 + 18	2 + 23	2 + 20	2 + 23	2 + 18	
Fuel Used	5,389	6,158	6,836	4,150	7,174	6,180	
Specific Range/Altitude	0.186/FL 410	0.162/FL 450	0.146/FL 410	0.241/FL 450	0.139/FL 410	0.162/FL 450	
Remarks	Certification Basis FAR/JAR 25, 1992 Exec. config.;	FAR 25, 2004	FAR/JAR 25, 1980/2002	FAR 25, 1979/91/99	FAR/JAR 25, 1980/2004	FAR 25, 2004	
	baggage volume is flexible. Optional ISA+15°C engine flat rating.		Corporate shuttle; baggage volume is flexible.		Optional 89,700-lb MTOW. Optional BEVS.		

JETS 20,000 LB MTOW OR GREATER

Manufacturer Model	Dassault Falcon 900EX DA900EX	Bombardier Global 5000 BD-700-1A11	Gulfstream Aero. Gulfstream 500 GV-SP	Dassault Falcon 7X DA7X	Airbus Elite A318-112	Boeing BBJ3 737-900ER
B&CA Equipped Price	\$36,150,000	\$36,750,000	\$38,760,000	\$39,200,000	\$45,000,000	\$77,500,000
Characteristics	Seating 2+12/19	3+8/17	2+16/19	2+12/19	4+18/18	4+19/215
	Wing Loading 91.6	85.8	74.9	83.7	107.7	139.9
	Power Loading 3.22	2.97	2.77	3.48	3.05	3.44
	Noise (EPNdB): TO/Sideline/APR 79.8/90.5/92.3	79.9/89.1/89.7	77.6/90.5/90.8	TBD/TBD/TBD	83.0/91.9/93.9	NA/NA/NA
Dimensions (ft)	External					
	Length 66.3	96.8	96.4	76.1	103.2	138.2
	Height 24.8	25.5	25.8	25.6	42.1	41.2
	Span 63.4	94.0	93.5	82.6	111.8	117.4
	Internal					
	Length (OA/Net) 39.0/33.2	42.5/37.3	50.1/42.6	46.0/39.1	NA/70.2	107.2/107.2
	Height 6.2	6.3	6.2	6.2	7.4	7.1
	Width: Max/Floor 7.7/6.3	8.2/6.9	7.3/5.5	7.7/6.3	12.2/11.6	11.6/10.7
Baggage	Internal					
	Cu. ft/lb 127/2,866	195/1,000	226/2,500	140/NA	NA/NA	NA/NA
	External					
	Cu. ft/lb —/—	—/—	—/—	—/—	NA/NA	1,250/NA
Power	Engines 3 HON	2 RR	2 RR	3 P&WC	2 CFMI	2 CFMI
	TFE731-60	BR700-710A2-20	BR700-710C4-11	PW307A	CFM56-5B9/P	CFM56-7B27
	Output (lb ea.)/Flat Rating 5,000/ISA+17°C	14,750/ISA+20°C	15,385/ISA+15°C	6,100/ISA+17°C	23,300/ISA+15°C	27,300/ISA+15°C
	Inspection Interval 6,000c	OC	OC	7,200c	OC	OC
Weights (lb)	Max Ramp 48,500	87,950	85,500	63,900	143,080	188,200
	Max Takeoff 48,300	87,700	85,100	63,700	142,197	187,700
	Max Landing 42,000	78,600	75,300	60,500	126,765	157,300
	Zero Fuel 30,865c	56,000c	54,500c	39,100c	120,151c	149,300c
	BOW 26,029	50,830	48,000	33,100	110,500	110,500
	Max Payload 4,836	5,170	6,500	6,000	26,451	38,800
	Useful Load 22,471	37,120	37,500	30,800	49,380	77,700
	Executive Payload 2,400	1,600	3,200	2,400	3,600	3,800
	Max Fuel 21,000	35,733	34,939	28,900	45,761	63,007
	Available Payload w/Max Fuel 1,471	1,387	2,561	1,900	3,619	14,693
	Available Fuel w/Max Payload 17,635	31,950	31,000	24,800	22,929	38,900
	Available Fuel w/Exec. Payload 20,071	35,520	34,300	28,400	45,761	63,007
Limits	Mmo 0.870	0.890	0.885	0.900	0.820	0.820
	Trans. Alt. FL/Vmo 250/370	FL 303/340	FL 270/340	NA/370	FL 250/350	FL 260/340
	PSI 9.3	10.3	10.2	10.2	8.2	9.0
Airport Performance	TOFL (SL elev., ISA temp.) 5,213	5,000	5,150	5,200	5,150	7,000
	TOFL (5,000' @25°C) 7,214	6,650	7,680	NA	6,370	12,840
	Hot/High Weight Limit 47,829	87,700	85,100	NA	142,200	174,857
	NBAA IFR Range 4,501	4,800	5,969	5,700	3,800	4,761
	V ₂ @ SL ISA, MTOW 133	130	141	134	129	NA
	VREF w/4 Pax, NBAA IFR Res. 110	107	111	104	NA	121
	Landing Distance w/4 Pax, NBAA IFR Res. 2,411	2,180	2,220	2,300	NA	2,475
Climb	Time to Climb/Altitude 18/FL 370	18/FL 370	16/FL 370	NA	NA	26/FL 370
	FAR 25 Engine-Out Rate (fpm) 755	651	707	NA	NA	NA
	FAR 25 Engine-Out Gradient (ft/nm) 340	300	301	NA	NA	NA
Ceilings (ft)	Certificated 51,000	51,000	51,000	51,000	39,800	41,000
	All-Engine Service 40,100	44,600	44,000	NA	NA	35,000
	Engine-Out Service 31,400	20,600	27,700	NA	NA	NA
	Sea-Level Cabin 25,300	26,500	29,200	29,200	NA	18,500
Cruise	Long Range					
	TAS 436	470	459	NA	447	455
	Fuel Flow 1,809	2,836	2,425	NA	NA	5,278
	Altitude FL 430	FL 450	FL 450	NA	NA	FL 370
	Specific Range 0.241	0.166	0.189	NA	NA	0.086
	High Speed					
	TAS 474	499	488	NA	469	470
	Fuel Flow 2,268	3,664	3,021	NA	NA	6,103
	Altitude FL 390	FL 430	FL 430	NA	NA	FL 370
	Specific Range 0.209	0.136	0.162	NA	NA	0.077
NBAA IFR Ranges (200 nm alternate)	Max Payload (w/avail. fuel)					
	Nautical Miles 3,405	4,150	4,893	NA	NA	2,190
	Average Speed 421	477	471	NA	NA	436
	Trip Fuel 15,530	28,618	28,093	NA	NA	31,920
	Specific Range/Altitude 0.219/FL 450	0.145/FL 470	0.174/FL 490	NA	NA	0.069/FL 350
	Max Fuel (w/avail. payload)					
	Nautical Miles 4,404	4,858	5,788	NA	NA	4,324
	Average Speed 422	479	453	NA	NA	445
	Trip Fuel 18,980	32,526	32,142	NA	NA	56,800
	Specific Range/Altitude 0.232/FL 470	0.149/FL 470	0.180/FL 490	NA	NA	0.076/FL 390
	Four Pax (w/avail. fuel)					
	Nautical Miles 4,469	4,876	5,941	5,820	NA	4,736
	Average Speed 422	479	453	460	NA	446
	Trip Fuel 18,980	32,535	32,193	26,491	NA	57,440
	Specific Range/Altitude 0.235/FL 470	0.150/FL 470	0.185/FL 490	0.220/FL 490	NA	0.082/FL 410
	Ferry					
	Nautical Miles 4,562	4,921	6,009	NA	NA	4,789
	Average Speed 422	479	453	NA	NA	446
	Trip Fuel 18,980	32,560	32,216	NA	NA	57,490
	Specific Range/Altitude 0.240/FL 470	0.151/FL 470	0.187/FL 490	NA	NA	0.083/FL 410
Missions (4 pax)	300 nm					
	Runway 2,700	2,495	3,366	2,760	NA	NA
	Flight Time 0 + 47	0 + 46	0 + 47	0 + 46	NA	0 + 49
	Fuel Used 1,614	2,755	2,380	1,902	NA	3,700
	Specific Range/Altitude 0.186/FL 450	0.109/FL 490	0.126/FL 450	0.158/FL 410	NA	0.081/FL 410
	600 nm					
	Runway 2,784	2,584	3,388	2,754	NA	NA
	Flight Time 1 + 27	1 + 23	1 + 27	1 + 26	NA	1 + 29
	Fuel Used 2,688	4,441	3,700	2,912	NA	7,300
	Specific Range/Altitude 0.223/FL 450	0.135/FL 490	0.162/FL 510	0.206/CL 490	NA	0.082/FL 410
	1,000 nm					
	Runway 2,796	2,706	3,413	2,750	NA	4,065
	Flight Time 2 + 20	2 + 13	2 + 20	2 + 19	2 + 32	2 + 25
	Fuel Used 4,173	6,746	5,511	4,374	NA	12,020
	Specific Range/Altitude 0.240/FL 450	0.148/FL 490	0.181/FL 510	0.229/FL 490	NA	0.083/FL 410
Remarks	Certification Basis FAR 25 1979/91/96	FAR 25, 1998/04 EASA 25, 2004	FAR 25, 2002	FAR/EASA 25 pending	FAR 25 2003	FAR 25 A 77 pending
	Optional 49,000-lb MTOW. Price includes EASy cockpit.	Optional 89,700-lb MTOW. Optional BEVS.		All data preliminary.	*Also avail. with PW6124 engines and opt'l. 3,540-lb capacity ACT.	2008 dollars. All data preliminary. 300 & 600 nm missions B&CA est.

ULTRA-LONG-RANGE JETS

Manufacturer Model		Gulfstream Aero. Gulfstream 550	Bombardier Global Express XRS BD-700-1A10	Airbus Corporate Jetliner A319-133	Boeing BBJ1 737-700IGW	Boeing BBJ2 737-800		
B&CA Equipped Price		\$46,665,000	\$47,750,000	\$55,000,000	\$57,500,000	\$69,500,000		
Characteristics	Seating	4+16/19	4+8/17	4+48/134	4+19/149	4+19/189		
	Wing Loading	80.1	95.9	126.3	127.5	129.9		
	Power Loading	2.96	3.32	3.14	3.13	3.19		
	Noise (EPNdB): TO/Sideline/APR	79.3/90.2/90.8	83.4/88.4/89.8	85.9/91.5/94.3	85.6/95.2/95.9	86.0/94.7/96.3		
Dimensions (ft)	External							
	Length	96.4	99.4	111.0	110.3	129.5		
	Height	25.8	25.5	38.6	41.2	41.2		
	Span	93.5	94.0	111.8	117.4	117.4		
Internal								
Length: OA/Net	50.1/42.6	48.4/43.2	78.0/78.0	79.2/79.2	98.3/98.3			
Height	6.2	6.3	7.4	7.1	7.1			
Width: Max/Floor	7.3/5.5	8.2/6.9	12.2/11.6	11.6/10.7	11.6/10.7			
Baggage	Internal							
	Cu. ft/lb	226/2,500	195/1,000	NA/NA	NA/NA	NA/NA		
External								
Cu. ft/lb	—/—	—/—	NA/4,687	150/NA	750/NA			
Power	Engines							
		2 RR	2 RR	2 IAE	2 CFMI	2 CFMI		
		BR700-710C4-11	BR700-710A2-20	V2527M-A5*	CFM56-7B27	CFM56-7B27		
	Output (lb ea.)/Flat Rating	15,385/ISA+15°C	14,750/ISA+20°C	26,500/ISA+30°C	27,300/ISA+15°C	27,300/ISA+15°C		
	Inspection Interval	OC	OC	OC	OC	OC		
Weights (lb)	Max Ramp	91,400	98,250	167,380	171,500	174,700		
	Max Takeoff	91,000	98,000	166,447	171,000	174,200		
	Max Landing	75,300	78,600	137,787	134,000	146,300		
	Zero Fuel	54,500c	56,000c	128,969c	126,000c	138,300c		
	BOW	48,700	51,200	97,653	95,960	103,220		
	Max Payload	5,800	4,800	31,316	30,040	35,080		
	Useful Load	42,700	47,050	69,727	75,540	71,480		
	Executive Payload	3,200	1,600	9,600	3,800	3,800		
	Max Fuel	40,994	44,642	61,017	71,737	69,982		
	Available Payload w/Max Fuel	1,706	2,408	8,710	3,803	1,498		
	Available Fuel w/Max Payload	36,900	42,250	38,411	45,500	36,400		
	Available Fuel w/Exec. Payload	39,500	44,642	60,127	71,737	67,680		
Limits	Mmo	0.885	0.890	0.820	0.820	0.820		
	Trans. Alt. FL/Vmo	FL 270/340	FL 303/340	FL 250/350	FL 260/340	FL 260/340		
	PSI	10.2	10.3	8.3	9.0	9.0		
Airport Performance	TO (SL elev.; ISA)	5,910	6,190	5,905	5,950	6,985		
	TO (5,000' elev. @ 25° C)	9,070	7,880	8,900	8,800	12,850		
	Hot/High Weight Limit	91,000	94,513p	166,450	169,047	174,200		
	NBAA IFR Range	6,738	5,924	4,650	6,123	5,606		
	V2 @ SL, ISA, MTOW	147	136	152	141	152		
	VREF w/4 Pax, NBAA IFR Res.	112	108	111	116	122		
Landing Distance w/4 Pax, NBAA IFR Res.	2,240	2,196	2,970	2,330	2,505			
Climb	Time to Climb/Altitude	18/FL 370	20/FL 370	25/FL 370	25/FL 370	27/FL 370		
	FAR 25 Engine-Out Rate (fpm)	594	473	770	NA	NA		
	FAR 25 Engine-Out Gradient (ft/nm)	242	209	NA	NA	NA		
Ceilings (ft)	Certificated	51,000	51,000	41,000	41,000	41,000		
	All-Engine Service	42,700	42,400	37,200	38,000	37,700		
	Engine-Out Service	25,820	18,000	22,000	20,500	20,000		
	Sea-Level Cabin	29,200	30,125	22,000	18,500	18,500		
Cruise	Long Range	TAS	459	470	447	452		
		Fuel Flow	2,563	2,947	4,565	4,799	5,084	
		Altitude	FL 450	FL 430	FL 370	FL 390	FL 390	
	High Speed	Specific Range	0.179	0.159	0.098	0.094	0.089	
		TAS	488	499	469	470	470	
		Fuel Flow	3,021	3,652	5,800	5,710	5,937	
	Altitude	FL 430	FL 410	FL 390	FL 370	FL 370		
	Specific Range	0.162	0.137	0.081	0.082	0.079		
NBAA IFR Ranges (200-nm alternate)	Max Payload (w/avail. fuel)	Nautical Miles	5,767	5,575	2,625	3,167	2,227	
		Average Speed	452	478	436	435	433	
	Max Fuel (w/avail. payload)	Trip Fuel	33,993	38,955	33,161	39,380	29,820	
		Specific Range/Altitude	0.170/FL 490	0.143/FL 470	0.079/FL 410	0.080/FL 370	0.075/FL 370	
	Eight Pax (w/avail. fuel)	Nautical Miles	6,708	6,075	5,200	6,098	5,580	
		Average Speed	453	479	439	441	445	
	Ferry	Trip Fuel	38,205	41,445	55,832	66,780	64,370	
		Specific Range/Altitude	0.176/FL 490	0.147/FL 490	0.093/FL 410	0.091/FL 410	0.087/FL 410	
	NBAA IFR Missions (8 Pax)	1,000 nm	Nautical Miles	6,862	6,185	5,250	6,166	5,667
			Average Speed	451	480	434	441	445
3,000 nm		Trip Fuel	38,110	41,493	55,867	66,820	64,770	
		Specific Range/Altitude	0.180/FL 510	0.149/FL 490	0.094/FL 410	0.092/FL 410	0.087/FL 410	
6,000 nm		Runway	3,436	2,756	3,300	3,600	3,670	
		Flight Time	2 + 20	2 + 13	2 + 25	2 + 27	2 + 26	
3,000 nm		Fuel Used	5,599	6,676	9,975	10,610	11,300	
		Specific Range/Altitude	0.179/FL 490	0.150/FL 490	0.100/FL 410	0.094/FL 410	0.088/FL 410	
6,000 nm		Runway	3,599	3,669	3,900	4,210	4,790	
		Flight Time	6 + 42	6 + 20	6 + 54	6 + 55	6 + 51	
3,000 nm	Fuel Used	15,474	18,988	28,600	30,280	32,370		
	Specific Range/Altitude	0.194/FL 490	0.158/FL 490	0.105/FL 410	0.099/FL 410	0.093/FL 410		
6,000 nm	Runway	5,277	6,006	NP	5,865	NP		
	Flight Time	13 + 15	12 + 31	NP	13 + 36	NP		
3,000 nm	Fuel Used	33,428	40,851	NP	65,500	NP		
	Specific Range/Altitude	0.179/FL 490	0.147/FL 490	NP	0.092/FL 410	NP		
Remarks	Certification Basis	FAR 25, 1997/03/02	FAR 25, 1998/03 JAR 25 BEVS standard.	FAR 25, 1999 *Also available with CFM56-5B7 engines with 27,000 lbf.	FAR 25 A 77, 1967/98 2007 dollars.	FAR 25 A 77, 1967/98 2007 dollars.		