WE DIDN’T JUST CREATE A NEW JET AIRCRAFT.
WE CREATED A NEW JET CUSTOMER.

Private jet travel was once reserved for the elite. Eclipse Aerospace changed all that. Because the way we saw it, why shouldn’t the convenience, performance, and safety of private jet travel be available to more people? People, for example, like you?

Our answer was a family of Jets that is affordable, easy to own, easy to operate, and offers performance capabilities previously found only in military and commercial aircraft.

When we introduced the twin-engine Eclipse 500, we introduced a completely new kind of jet to the aviation industry. The Eclipse 500 has the high-tech features of aircraft costing millions more but is built using innovative techniques that drive quality up and manufacturing costs down.

Not only less expensive than any other twin-engine jet to buy, the fuel-efficient Eclipse 500 is also the least expensive twin-engine jet to own and operate. The Eclipse 500 puts the practical benefits and sheer exhilaration of jet aviation within the means of more people and companies than ever before.
IT’S TRUE.  
THERE’S NO FEELING LIKE THE ONE YOU GET ON APPROACH.

The morning is calm and beautiful as you approach the aircraft parked on the distant ramp. Even from this distance, one jet stands apart. Sleek and stylish, it’s the Eclipse 500.

As you get closer, you notice two custom Pratt & Whitney Canada engines. Those twin engines combine reliability with a 370-kts cruising speed that quickens the pulse. And the excitement doesn’t end there.

There’s room for up to six adults in the leather-appointed interior. And with enough fuel to take you 1,300 nm, the Eclipse 500 is also the most fuel-efficient jet available, using just 48 gallons per hour while cruising at 41,000 ft. It combines jet speeds and turboprop fuel burns on short trips at lower altitudes, unlike other twin-engine jets that simply burn more fuel without appreciably reducing trip time.

When you arrive at your choice of thousands of airstrips, you’ll kiss the ground at 75 kts with barely a flare, and roll to a stop in under 2,300 ft.

Yes, the Eclipse 500 is unique. Designed from the outset to be easy to fly and reliable to operate, it’s for people who have a passion for flying. It’s for people just like you.
The Eclipse 500 jet offers excellent range capacity of 1,125 nm. Its short takeoff and slow landing speed make it possible for you to use more than 10,000 airports in the U.S. alone.

Not only is the Eclipse 500 the most fuel-efficient jet available today, it delivers performance—from its 370 kt maximum cruise speed to its 3424 ft/min rate of climb—so every trip is fast and efficient, regardless of your destination.

**ECLIPSE 500 PERFORMANCE**

<table>
<thead>
<tr>
<th>MAX CRUISE SPEED</th>
<th>RANGE - MAX NBAA</th>
<th>EROSION LOAD</th>
<th>STALL SPEED</th>
<th>SERVICE CEILING</th>
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<tr>
<td>370 KT</td>
<td>1,125 NM</td>
<td>2,064 KM</td>
<td>49 KT</td>
<td>41,000 FT</td>
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**ECLIPSE 500 RANGE**

The Eclipse 500 jet offers excellent range capacity of 1,125 nm. Its short takeoff and slow landing speed make it possible for you to use more than 10,000 airports in the U.S. alone.
DESIGNED FOR PILOTS.
AND FOR PASSENGERS.

When you’re looking for thrilling performance, point the Eclipse 500’s nose up above the horizon and watch the ground race away as two turbofan engines shrug off gravity. With the largest flight envelope in its class, you can soar up to 41,000 ft when it’s stormy, or glide low and slow when it’s clear. Either way, you’ll feel responsiveness you never thought a jet could provide, thanks to near-instantaneous engine spool times that give you pinpoint control.

Of course, there are plenty of people who want their flights to be anything but exciting. They’ll take comfort in knowing the Eclipse 500 is designed to enhance aviation’s reputation as the safest way to get from A to B. The jet’s engines have an Automatic Power Reserve to boost power to one engine by 10 percent if the other should fail. Both engines are protected by a next-generation fire suppression system pioneered by Eclipse Aerospace.

The Eclipse 500 features pneumatic de-ice boots, heated engine inlets, electrically heated windshields and data ports that enable flight into known icing conditions.

Reliability and redundancy are built into every system, from the four independent power sources to the electric trim motors and servos. So the pilot is never overwhelmed, and the passengers can relax and enjoy the ride.
AN ECLIPSE 500 WILL HAVE A HUGE IMPACT ON YOUR LIFE. NOT YOUR PLANET.

Not only is the Eclipse 500 the quietest, most fuel-efficient twin-engine jet in the world, but it was also built with an eye to the environment. Reliable, shock-proof LED cabin lights provide more light than incandescent bulbs, consume less energy, and emit less heat, while lasting up to 1,000 times longer. Nearly every component of the aluminum structure can be recycled. And the all-electric design includes many parts requiring minimal replacement or maintenance.

The Eclipse 500 uses PhostrEx™, a fire suppression technology not only more effective than any existing system, but also the only one without Halon, a compound so dangerous to the environment that it has been banned in every industry except aviation. PhostrEx is the first new engine fire suppression technology to be approved by the U.S. EPA and the FAA in more than 50 years, and it also conforms to the Montreal Protocol. Available exclusively on Eclipse Aerospace aircraft, PhostrEx may become the future industry standard.

And while Eclipse 500 engines offer a 900-lb takeoff thrust, the jet produces less noise than all multi-engine and most single-engine piston-powered aircraft, and is a full 40 dB quieter than the world’s most stringent Stage 4 noise requirements.
The Eclipse 500 uses an Electronic Power Distribution System (EPDS) that’s redundant and reliable. It has four separate power sources feeding five independent buses. Electronic circuit breakers provide state-of-the-art functionality, even allowing you to use them as switches to manage power allocation.

Redundancy is also built into the Eclipse 500’s fuel system. All 1,698 lb (251 U.S. gal) of the aircraft’s usable fuel is stored in the wings. Fuel probes and optical sensors in each wing precisely track fuel, and the simple motive flow system nearly eliminates the possibility of trapped fuel. Avio NG flight control software calculates fuel flow data, provides exact range measurements, and auto-balances fuel when necessary.

Landing and ground operations are simple and smooth with the Eclipse 500’s trailing link main gear and steerable nose gear. And with smart actuators at work, landing gear operation is controlled electronically for the utmost in reliability. For added redundancy, the gear includes a manual release function for freefall capability. The braking system uses disc brake assemblies controlled via toe brakes located on the rudder pedals.
MYTH: JETS ARE HARD TO FLY.

A surprising truth about jets is that they are actually easier and safer to fly than you may have been led to believe. When you step up to a jet, you get better performance and more reliable operation. And with the Eclipse 500, you also get a highly automated flight deck that sets a new standard for reliability and capability—and makes the Eclipse 500 the most integrated twin-engine jet flying today.

In the Eclipse 500, that automation comes from Avio NG, the next generation of Total Aircraft Integration™. Designed exclusively for Eclipse Aerospace, Avio NG utilizes technology never before available in general aviation. Avio NG centrally controls aircraft systems including avionics, engine operation, fuel system, flaps, landing gear, cabin pressure, and temperature. Beyond that, it acts as a virtual copilot, providing checklists and advanced navigation and avionics information, improving safety and dramatically reducing pilot workload—especially during single-pilot operation.

Avio NG includes dual Garmin® GPS 400W units that deliver point-to-point functionality, en route and terminal GPS navigational guidance with autopilot coupling, Wide Area Augmentation System (WAAS) capabilities for Localizer Performance with Vertical Guidance (LPV) approaches, and much more. These integrated functions provide the navigational capability for private and commercial operations worldwide.

Experienced pilots will marvel at Avio NG’s sophistication. And those new to jet aircraft will be amazed at how easy and intuitive Avio NG is to use. But mostly you’ll love how it makes the Eclipse 500 effortlessly fun to fly.
It looks easy to fly because it is easy to fly.

The Eclipse 500’s flight deck is both highly sophisticated and greatly simplified. It’s completely free of unnecessary control heads. Avio NG provides unmatched avionics functionality that significantly reduces pilot workload by simplifying tasks, generating useful information, managing systems, and assisting with troubleshooting. The pilot views all flight parameters, engine and system performance, navigation aids, checklists, charts, and more in high resolution. Even the radios are integrated into Avio NG, eliminating bulky tuning units and simplifying radio management.

Avio NG in action

PreFlight.
As your virtual copilot, Avio NG goes to work as soon as power is applied to the Eclipse 500, bringing all aircraft systems online and confirming normal operation. Avio NG prompts electronic checklists, calculates weight and balance, determines performance, and even activates the airspeed targets and N1 engine settings for takeoff. When the cabin door closes, Avio NG verifies that the cabin is sealed, automatically adjusts the independent cabin and cockpit zone temperatures, and prepares the pressurization schedule for the mission ahead. A copilot that does exactly what needs to be done, without needing to be told—that’s Avio NG. That’s Total Aircraft Integration.

Takeoff and Climb.
Even before your wheels leave the ground, Avio NG ensures proper flap and landing gear configuration and systems setup for takeoff. Don’t worry about thrust level detents, either, because Avio NG manages the redundant FADECs to provide the maximum safe thrust available for the conditions present. As you engage the gear handle and flaps, Avio NG commands the gear and flaps to retract, then monitors their positions throughout the entire sequence. You’ll climb to 35,000 ft in just 22 minutes, or all the way up to 41,000 ft without bothersome and inefficient step climbs. Avio NG automatically maintains comfortable temperature and cabin pressure the entire climb and presents a big-picture moving map pointing you to your destination.

Approach.
Avio NG simplifies this critical stage by providing advisory vertical navigation cues, slowly lowering cabin pressure, automatically balancing fuel, and making the autopilot available to fly approach. A Jeppesen™ approach chart is available for electronic display, showing your aircraft position on the chart itself. If icing conditions exist, the flick of one switch tells Avio NG to cycle the pneumatic de-ice boots and heat the engine inlets. As you approach the field, Avio NG verifies that landing gear is down and locked and flaps are set.

Electronic checklists are generated, and Avio NG prompts the appropriate electronic checklists. Avio NG monitors the autothrottle in flight and provides advisory vertical navigation cues and advisory power management.
YOU’LL INSTANTLY KNOW ABOUT ANY PROBLEMS — AND THEIR SOLUTIONS.

Avion NG constantly monitors aircraft systems, and if it should ever discover a problem, you’ll know about it right away. A crew-alerting system reports errors and faults as they occur, and prioritizes them so you know what to do and in what order to do it. The system presents checklists that walk you through the corrective action step by step, without having to search through manuals or trust your memory.

NO SURPRISES.

Every Eclipse 500 comes with color weather radar and a moving map display as standard equipment. These tools help maintain situational awareness throughout the flight, and give you the critical information you need to adjust when conditions warrant.
By now you can see that the Eclipse 500 is extraordinary. So it should come as no surprise that its cabin is, too. Eclipse Aerospace partnered with BMW Group DesignworksUSA to create the interior environment for the Eclipse 500. The result is an aircraft that doesn’t sacrifice style and comfort for cost and space.

Thoughtful, ergonomic interior appointments create a peerlessly beautiful cabin with the fit, finish, and attention to detail that characterize the world’s finest automobiles. The cabin is a tasteful blend of beauty, comfort, and practicality. Our LX Edition adds luxurious materials and extra features to enhance the comfort of everyone who climbs aboard. We also used superior acoustic and thermal insulation to make the cabin of the Eclipse 500 extremely quiet, allowing passengers to easily carry on a quiet conversation.
FLY IN
RELAXING COMFORT.

The Eclipse 500’s seats are built for comfort, featuring leather seating surfaces, seatback storage pockets, leather outboard armrests on all seats, and inboard armrests on cockpit seats. The IX Edition goes even further by including luxurious all-leather seats, adjustable lumbar supports, and stowable inboard armrests on every seat. The cabin also houses two convenient 110-volt AC outlets that are included in the IX Edition and Commercial Operations Package.

Every Eclipse 500 includes adjustable-brightness map lights and a dome light in the cockpit, individual reading lights and upper accent wash lighting in the cabin, and a baggage compartment light. The IX Edition adds lower-cabin wash lighting, as well as cockpit footwell lighting.

Cabin storage space for baggage and cargo lets you keep luggage close and convenient throughout the flight, and ensures your important items remain safely pressurized and climate-controlled.

DUAL-ZONE CLIMATE CONTROL

The Eclipse 500 climate-control system features independent zone temperature controls for the cockpit and cabin. Temperature settings are selected by the pilot and regulated by Auto-NG throughout the flight. The oxygen system consists of an oxygen cylinder located in the nose of the jet and includes a pilot quick-don mask and five passenger drop-down masks. The cabin pressurization system automatically maintains an 8,000-ft cabin at the 41,000-ft maximum cruising altitude. A sea-level cabin can be maintained up to 21,500 ft MSL.
OWNERSHIP EXPERIENCE

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WE MEET AND EXCEED CUSTOMER EXPECTATIONS.

Eclipse Aerospace not only built the most cost-efficient, safe, and reliable aircraft in the world, we also created an extensive training and customer service organization to meet and exceed our customers’ expectations.

Owning an Eclipse 500 isn’t just about convenience and efficiency. It’s also about safety and value. It starts with the most advanced training program in general aviation, and it continues as we gather real-time aircraft performance data whenever you fly, helping keep you informed about any issues before they become problems.

Safety. Convenience. Peace of mind. Plus the lowest operating cost of any jet in its class. All exclusively from Eclipse Aerospace.
GETTING YOU UP TO SPEED IN YOUR NEW JET.

Flying your own Eclipse 500 is an exhilarating experience unmatched in general aviation. Likewise, our pilot training curriculum is unlike any other program available. During your training at one of Eclipse Aerospace’s Training Centers, you will learn from instructors who possess extensive knowledge of flying the Eclipse 500, all-attitude maneuvering, and high-altitude operations.

Our training program is designed for pilots at various skill levels and includes high-altitude physiology training, upset recovery training, a type-rating transition course, post-certification mentoring, and recurrent training. We offer absolutely everything the pilot needs, including instruction time in one of our two state-of-the-art Level D Full Motion simulators. This is the most comprehensive flight training available in general aviation.

New Eclipse 500 pilots enter the Eclipse Aerospace Mentor Program, where a mentor pilot will strengthen your skills and help you achieve a level of safety equivalent to that of professional, multi-pilot flight crews. An important component of the Eclipse 500 training process, mentoring gives you additional, supervised flight hours with an authorized Eclipse 500 mentor pilot.

Want to work on your own aircraft? Maintenance training is available for both owners and maintenance technicians who want to perform approved repairs on the Eclipse 500.
ALL OF THE FUN
NONE OF THE HASSLE

Eclipse Aerospace offers a total “Customer First” ownership experience.

Our “Customer First” support department can be reached conveniently at:

Web: www.eclipseaerospace.net
Email: CustomerFirstTeam@eclipseaerospace.net
Phone: 877.350.0538

AOG support is available Monday through Friday, 9:00 AM to 8:00 PM Eastern Time, and 24 hour, 7 day emergency service is available at 877.350.0538.

The Eclipse 500 is the plane you’ve dreamed of flying and owning. So go ahead and take the next step. See everything for yourself and learn even more by visiting our manufacturing facility in Albuquerque, New Mexico.
Eclipse Aerospace provides customer and product support 24 hours a day, 365 days a year because we believe no one can take better care of your Eclipse 500 than we can. If you should have an unscheduled service event, you’ll be glad to know Eclipse Aerospace has a return-to-service capability to get you back in the air fast.

Eclipse Aerospace provides major modification and parts distribution via our Platinum Service Centers located in Albuquerque, New Mexico, Chicago, Illinois, and Istanbul, Turkey. Additional licensed Gold Service Centers provide major inspections and aircraft service throughout the world.

Eclipse Aerospace currently supports and has trained hundreds of mechanics throughout the world who are qualified to maintain the Eclipse fleet. Any FAA qualified mechanic can provide routine service and inspection for Eclipse Aircraft. Through our service centers, Eclipse specific parts can be forwarded to local mechanics for immediate service of your Eclipse Aircraft.
HOW DO WE PRODUCE LIGHTER BUT STRONGER?

We use high-precision machined components in place of heavier, high-part-count assemblies, which standardizes production and ensures that components fit the first time, every time. Our friction stir-welded subassemblies are produced in significantly less time, yet possess higher strength.

What does all this mean to you?

A less expensive product that is produced lighter but stronger.

WINNER OF OUR NATION’S HIGHEST AWARD FOR AVIATION.

Eclipse was awarded the 2005 Robert J. Collier Trophy, the most prestigious award in American aviation, for “innovation in the advancement of general aviation through the design, development, and manufacture of the Eclipse 500 jet.”
A DREAM REALIZED...

Eclipse was formed with the intention of transforming the aviation industry. That’s why we embrace and incorporate innovation, imagination, and boldness in everything we do.

When we set out to create the Eclipse 500, we weren’t taking advantage of an existing opportunity, but creating our own. Together with some of the best thinkers, doers, and design engineers in the jet aviation industry, and quite a few of the smartest people we know outside the industry, that’s exactly what we did.

Throughout the creation and refinement of the Eclipse 500, we’ve approached every goal with the determination to always take things to the next, higher level.
Eclipse 500 Performance and Specifications

**Specifications**

TANDEM SEATING L/R 1 EA AFT, STA TO STA 15 FT (4.6 M) W/STATION.
LONGEST DISTANCE AFT SEAT, STA 4 AFT (2,600 LBS) LANDING WEIGHT.

**Takeoff Distance**

- **5,404 ft / 1,651 m**
- **1,064 ft / 324 m**

**Takeoff (5,000 ft) (1,524 m) at ISA + 15˚C**

- **22 mph / 35 km/h**
- **22 mph / 35 km/h**

**Takeoff at 5,000 ft (1,524 m) at ISA + 15˚C**

- **2,345 ft / 715 m**
- **2,250 ft / 686 m**

**Single Engine Takeoff CLimb at 5,000 ft (1,524 m) at ISA + 15˚C**

- **989 ft / 301 m/h**
- **301 m/h**

**Single Engine Service Ceiling**

- **715 m**
- **686 m**

**Range**

- **1,125 NM**
- **2,066 NM**

**Max Altitude**

- **21,500 ft**
- **21,500 ft**

**Single Engine Service Ceiling**

- **41,200 ft**
- **41,200 ft**

**Max Takeoff**

- **6,034 lb**
- **6,000 lb**

**Max Landing**

- **5,600 lb**
- **5,600 lb**

**Empty**

- **3,634 lb**
- **3,634 lb**

**Max Usefull Load**

- **2,400 lb**
- **2,400 lb**

**Max Fuel Capacity**

- **1,476 US / 231 GAL**
- **770 US / 20 L**

**Gross Weight**

- **4,000 LBS**
- **4,000 LBS**

**Max Gross Weight**

- **4,000 LBS**
- **4,000 LBS**

**Max Tare Weight**

- **1,648 LBS**
- **1,648 LBS**

**Max Tare Weight & Weight Canada**

- **2,400 LBS**
- **2,400 LBS**

**Max Tare Weight & Weight Canada**

- **900 US / 251 Gal**
- **2,400 LBS**

**Max Pressurization**

- **0.050**
- **0.050**

**Performance and Specifications**

**Engine**

- **2 Pratt & Whitney Canada PW610F TurboFans**
- **900 lb (each)**

**Max Thrust at Sea Level**

- **6,533 m**
- **2,438 m**

**Max Thrust at Sea Level**

- **21,500 ft**
- **8,000 ft**

**Max Climb Rate**

- **3,424 FT/MIN / 1,044 m/MIN**
- **2,308 FT/MIN / 711 m/MIN**

**Max Climb Rate**

- **775 kt**
- **685 kt**

**Max Climb Rate**

- **285 kt / 0.64 mach**
- **285 kt / 0.64 mach**

**Max Climb Rate**

- **6,000 lb**
- **6,000 lb**

**Max Climb Rate**

- **127 NM**
- **127 NM**

**Cabin Altitude at 41,000 ft**

- **10,000 ft**
- **10,000 ft**

**Pressurization**

- **8,000 ft**
- **8,000 ft**

**Cabin Altitude at 41,000 ft**

- **2,400 ft**
- **2,400 ft**

**Max Tare Weight**

- **1,648 LBS**
- **1,648 LBS**

**Max Tare Weight**

- **2,400 LBS**
- **2,400 LBS**

**Max Tare Weight**

- **900 US / 251 Gal**
- **900 US / 251 Gal**

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