TYPE CERTIFICATE DATA SHEET NO. A00002AC.

This data sheet which is part of Type Certificate No. A00002AC prescribes conditions and limitations under which the product for which the type certificate was issued meets the Airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Eclipse Aviation Corporation
2503 Clark Carr Loop SE
Albuquerque, NM 87106

Type Certificate Holder Record: Type Certificate initial issuance to Eclipse Aviation Corporation

I. Model EA500, (Normal Category), Approved September 30, 2006

Engines
Two Pratt & Whitney Canada PW610F-A,
Type Certificate Data Sheet (TCDS) E00074EN

Fuel
JET A and Jet A-1 per ASTM D 1655; JP-8 per MIL-T-83133

Fuels not containing icing inhibitors must have MIL-I-27686, MIL-I-85470, or Phillips PFA-55MB fuel system icing inhibitors blended into the aircraft fuel at concentrations not less than 0.10% but no more than 0.15% by volume. The minimum fuel icing inhibitor content during refueling is 0.10% by volume.

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<th>Engine Limits</th>
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Airspeed Limits

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tbody>
<tr>
<td>$V_o$</td>
<td>Maximum Operating Maneuvering Speed</td>
<td>180 KEAS</td>
</tr>
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<td>$V_{MO}$</td>
<td>Maximum Operating Airspeed</td>
<td>275 KEAS</td>
</tr>
<tr>
<td>$M_{MO}$</td>
<td>Maximum Operating Mach</td>
<td>0.64 M</td>
</tr>
<tr>
<td>$V_{FE}$ (Flap T/O)</td>
<td>Maximum Flap Extended Speed</td>
<td>200 KEAS</td>
</tr>
<tr>
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<td>Maximum Flap Extended Speed</td>
<td>120 KEAS</td>
</tr>
<tr>
<td>$V_{LO}$</td>
<td>Maximum Landing Gear Operating Speed</td>
<td>200 KEAS</td>
</tr>
<tr>
<td>$V_{LE}$</td>
<td>Maximum Landing Gear Extended Speed</td>
<td>275 KEAS</td>
</tr>
<tr>
<td>Maximum tire ground speed</td>
<td></td>
<td>139 KNOTS</td>
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</table>
Center of Gravity (C.G.) Range

Forward limits: 195.65 inches aft of datum up to 4,910 lbs with a straight line taper to 197.5 inches at 5,760 lbs.

Aft Limits: 203.25 inches aft of datum up to 5,509 lbs with a straight line taper to 200.0 inches at 5,760 lbs.

Empty Weight. C.G. Range None.

Minimum Crew 1 Pilot plus required equipment as specified in the FAA Approved Airplane Flight Manual (AFM)

Maximum Weights

- Max. Ramp 5,800 lbs
- Max. Takeoff 5,760 lbs
- Max. Landing 5,415 lbs
- Max. Zero Fuel 4,860 lbs

Number of Seats 6 Max (Includes pilot and crew); Refer to the Airplane Flight Manual (AFM), Document No. 06-100106, latest FAA approved revision, Section 6 for seat configurations and moment arms.

Maximum Compartments Weights 260 lbs; 1 compartment, moment arm 217.92 inches aft of datum

Baggage Compartment floor loading is 100 lb/ft²

Cabin floor loading is 80 lb/ft²
Fuel Capacity

- 227.5 gallons (USG) total; 224 gallons (USG) usable; 3.5 gallons (USG) unusable
- Moment arm 198 inches aft of datum

Oil Capacity

- 6.48 quarts (USQ) total per engine; 1.15 quarts (USQ) usable per engine

Maximum Operating Altitude

- Takeoff 10,000 ft MSL
- Operating 41,000 ft MSL

Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>UP</th>
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<tr>
<td>Elevator</td>
<td>25°± 0.5°</td>
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<td>Elevator Trim Tab</td>
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<tr>
<td>Ailerons</td>
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<tr>
<td>Aileron Trim</td>
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<td>Rudder Trim Tab</td>
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Engines

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- Type Certificate Data Sheet (TCDS) E00074EN

Fuel

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Airspeed Limits

- $V_o$: Maximum Operating Maneuvering Speed 180 KEAS
- $V_{MO}$: Maximum Operating Airspeed 285 KEAS
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- $V_{FE}$ (Flap T/O): Maximum Flap Extended Speed 200 KEAS
- $V_{FE}$ (Flap LDG): Maximum Flap Extended Speed 120 KEAS
- $V_{LO}$: Maximum Landing Gear Operating Speed 200 KEAS
- $V_{LE}$: Maximum Landing Gear Extended Speed 285 KEAS
- Maximum tire ground speed 139 KNOTS
Center of Gravity (C.G.) Range

Forward limits: 195.65 inches aft of datum up to 4,922 lbs with a straight line taper to 197.91 inches at 5,995 lbs.

Aft Limits: 204.37 inches aft of datum up to 5,461 lbs with a straight line taper to 199.74 inches at 5,995 lbs.

Empty Weight. C.G. Range None.

Maximum Weights
- Max. Ramp: 6,029 lbs
- Max. Takeoff: 5,995 lbs
- Max. Landing: 5,600 lbs
- Max. Zero Fuel: 4,922 lbs

Minimum Crew
1 Pilot plus required equipment as specified in the FAA Approved Airplane Flight Manual (AFM)

Number of Seats
6 Max (Includes pilot and crew); Refer to the Airplane Flight Manual (AFM), Document No. 06-121654, latest FAA approved revision, Section 6 for seat configurations and moment arms.

Maximum Compartments Weights
260 lbs; 1 compartment, moment arm 217.92 inches aft of datum
Baggage Compartment floor loading is 100 lb/ft²
Cabin floor loading is 80 lb/ft²
Fuel Capacity
254.4 gallons (USG) total; 250.9 gallons (USG) usable;
3.5 gallons (USG) unusable
Moment arm 198 inches aft of datum

Oil Capacity
6.088 quarts (USQ) total per engine; 0.832 quarts (USQ) usable per engine

Maximum Operating Altitude
Takeoff 10,000 ft MSL
Operating 41,000 ft MSL

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Empty Weight. C.G. Range

None.

Maximum Weights

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- Max. Takeoff: 5,995 lbs
- Max. Landing: 5,600 lbs
- Max. Zero Fuel: 4,922 lbs

Minimum Crew

1 Pilot plus required equipment as specified in the FAA Approved Airplane Flight Manual (AFM)

Number of Seats

6 Max (Includes pilot and crew); Refer to the Airplane Flight Manual (AFM), Document No. 06-122204, latest FAA approved revision, Section
6 for seat configurations and moment arms.

Maximum Compartments Weights
260 lbs; 1 compartment, moment arm 217.92 inches aft of datum
Baggage Compartments: moment arm 217.92 inches aft of datum
Cabin floor loading is 80 lb/ft²

Fuel Capacity
254.4 gallons (USG) total; 250.9 gallons (USG) usable;
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Data Pertinent to All Effectivities

Datum
Is located 23.25 inches forward of the nose radome.

Leveling Means
Laterally: Forward edge of the baggage compartment floor
Longitudinally: Left hand outboard seat track in front of the main cabin door

Certification Basis
14 CFR Part 23 through Amendment 55, Part 34 through Amendment 34-3, and Part 36 through Amendment 36-24.

Special Conditions:
23-128-SC for Engine Fire Extinguishing System
23-121-SC for Electronic Engine Control System
23-112A-SC for High Intensity Radiated Fields (HIRF) Protection

Equivalent Levels of Safety Findings:
ACE-02-19: 14 CFR §§ 23.777(d) and 23.781 Fuel Cutoff Control
ACE-05-32: 14 CFR §§ 23.1545(a) and 23.1581(d) for Indicated Airspeeds
ACE-05-34: 14 CFR §23.181(b), Dynamic Stability
ACE-05-35: 14 CFR §23.1353(h), Storage Battery Design and Installation

ACE-05-36: 14 CFR §23.1323(c), Airspeed Indicating System

ACE-06-01: 14 CFR § 23.1545(b)(4), Airspeed Indicator


ACE-07-04: 14 CFR § 23.1545(b)(4), Airspeed Indicator

Exemptions:
None

Compliance with ice protection for flight into known or forecast icing has not been demonstrated for issuance of a Type Certificate.

Compliance with ditching provision have not been met for issuance of a Type Certificate.

Type Certificate:  A00002AC, issued September 30, 2006

Date of application: July 12, 2001

Model EA500 is defined by Eclipse Aviation drawing 06-102100-1002, latest FAA approved revision.

Production Basis
The following Serial Numbers were produced under Type Certificate only: 000001 through 000011. Serial Numbers 000012 and subsequent produced under Production Certificate No. 500 issued April 26, 2007.

Equipment
The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
NOTES

Note 1  A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.

Note 2  The Eclipse EA500 must be operated according to the FAA approved Airplane Flight Manual (AFM), Document No. 06-100106, latest FAA approved revision or 06-121654, latest FAA approved revision, or 06-122204, latest FAA approved revision.

Note 3  FAA approved Airworthiness Limitations for inspection time limits and maintenance checks are included in Chapter 4 of the Aircraft Maintenance Manual (AMM) Document No. 06-117751, latest FAA approved revision.

Note 4  The Eclipse EA500 is Aircraft Group approved for Reduced Vertical Separation Minimum (RVSM). All airplanes are equipped with RVSM capable dual air data system, pilot and co-pilot Primary Flight Displays, and Autopilot.

Each operator must obtain RVSM operating approval.

Note 5  The Eclipse EA500 incorporates integrated avionics systems using software-based line replaceable units (LRU's) which share a digital signal transmission bus. The avionics configuration of the Eclipse EA500 as delivered from production is critical to the proper operation of the cockpit instrumentation system. Modification to the LRU software supplied with the Eclipse EA500, replacement of an LRU with a different LRU, or alteration of an LRU interface could adversely affect the airworthiness of the certified product. Accordingly, no changes to the integrated avionics system may be made without coordination with the Certificate Management Aircraft Certification Office.

Note 6  The Eclipse EA500 shall be maintained according to:

   Aircraft Maintenance Manual (AMM), No. 06-117751, latest revision
   Structural Repair Manual (SRM), No. 06-117755, latest revision
   Wiring Diagram Manual (WDM), No. 06-117753, latest revision
   Fault Isolation Manual, No. 06-117754, latest revision

Note 7  Any modification or changes in cockpit configuration which may affect aircrew workload, cockpit noise level or day/night operational capabilities must be evaluated by an FAA Aircraft Certification Flight Test Pilot.

Note 8  Application of six inch registration numbers is approved under FAR 45.29 as stated in approval memo from SW-MIDO-43, dated May 11, 2006 and memo from the Aircraft and Airport Rules Division, dated May 5, 2006.

Note 9  All pilots operating the Eclipse EA500 must be trained and qualified in accordance with the FAA Accepted/Approved Eclipse Aviation training program or other FAA Approved training program.

......END.....