DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A00005LA
Revision 7
CTRM Aviation Sdn. Bhd.
Eagle 150B
March 7, 2022

TYPE CERTIFICATE DATA SHEET NO. A00005LA

This data sheet which is part of the Type Certificate No. A00005LA lists the 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	CTRM Aviation Sdn. Bhd. Composites Technology City 75350 Batu Berendam Melaka, Malaysia
Type Certificate Holder Record	Eagle Aircraft Pty. Ltd. (EAPL - Australia) transferred TC A00005LA to Eagle Aircraft Malaysia (EAM) on May 30, 2002.
Type Certificate Holder Record	Eagle Aircraft (Malaysia) Sdn. Bhd. Composites Technology City Batu Berendam Airport 75350 Batu Berendam Melaka, Malaysia transferred TC A00005LA to: CTRM Aviation Sdn. Bhd. Composites Technology City 75350 Batu Berendam Melaka, Malaysia on January 1, 2004.

I. **Model 150B** (VLA - Special Class Category), Approved February 11, 1999

Engine	Continental IO-240-B (one engine). Type Certificate No. E7SO.
Fuel	100LL minimum grade aviation gasoline.
Engine Limits	2800 or 2790 rpm for all operations (125 hp) see note 5
Propeller and Propeller Limits	McCauley 1A135BRM7057 fixed pitch propeller. Type Certificate No. P-842. Diameter: Max. 70.0 inches (1778 mm). Min. 69.0 inches (1753 mm). No further reduction permitted. Static rpm at permissible throttle setting, not over 2300, not under 2200. No additional tolerance permitted. Avoid continuous operation while descending between 2150 and 2350 rpm with power retarded below 1/4 throttle.

OR
McCauley 1A135CRM7057 fixed pitch propeller.
Type Certificate No. P-842.

Diameter: Max. 70.0 inches (1778 mm).
Min. 69.0 inches (1753 mm).
No further reduction permitted.
Static rpm at permissible throttle setting, not over 2300, not under 2200. No additional tolerance permitted.

Avoid continuous operation while descending between 2050 and 2450 rpm with power retarded below 1/4 throttle.

Airspeed Limits (knots)

		IAS	CAS
Never Exceed	V_{ne}	167 (192 mph)	165 (190 mph)
Max. Structural Cruise	V_{no}	129 (149 mph)	130 (150 mph)
Max. Maneuvering	V_a	106 (122 mph)	107 (123 mph)
Max. Flaps Take-Off	V_{fe}	104 (120 mph)	100 (115 mph)
Max. Flaps Extended Full	V_{fe}	89 (102 mph)	85 (98 mph)

Center of Gravity (C.G.) Range

Forward Limit: 70.0 inches (1778 mm) aft of datum at 1300 lbs. (590 kg) or less.
73.0 inches (1854 mm) aft of datum at 1411 lbs. (640 kg) or at 1433 lbs. (650 kg) see note 5
Variation is linear between 1300 lbs. (590 kg) and 1411 lbs. (640 kg) or 1433 lbs. (650 kg) see note 5

Aft Limit: 75.0 inches (1905 mm) aft of datum at all weights.

Empty Weight C.G. Range: None.

Datum: 31.0 inches (787 mm) forward of the canard leading edge.

Leveling Means: Horizontal portion of the left hand side longeron/canopy rail.

Maximum Weight
Takeoff: 1411 lbs. (640 kg) or 1433 lbs. (650 kg) see note 5
Landing: 1411 lbs. (640 kg) or 1433 lbs. (650 kg) see note 5

Minimum Crew: 1 pilot at 80.8 inches (2052 mm) aft of datum.

No. of Seats: 2 at 80.8 inches (2052 mm) aft of datum.

Maximum Baggage
Hat shelf: 19 lbs. (9 kg) at 114.3 inches (2800 mm) aft of datum.
Baggage bins: 80 lbs. (36 kg) [40 lbs. (18 kg) each] at 114.2 inches (2900 mm) aft of datum.

Fuel Capacity: 26.9 US Gallons (102 litres) total at 111.5 inches (2832 mm).
25.6 US Gallons (97 litres) usable at 111.5 inches (2832 mm).
See note 1 for data on weight and balance.

Oil Capacity: 6 US quarts (5.7 litres) at 27.1 inches (688 mm)
(3 US quarts (2.8 liters) usable)
See note 1 for data on weight and balance.

Control Surface Movements	Aileron	Up	25º ± 1º
		Down	20º ± 1º
		Neutral	1º down ± 0.5º
	Elevator	Up	25º ± 0.5º
		Down	24º ± 1º
	Elevator Tab	Up	20º ± 1º
		Down	25º ± 1º
	Rudder	Left & Right	23º ± 1º
	Rudder Tab (anti-balance)	Left	13º ± 1º
		Right	17º ± 1º
	Canard Flaps	Up	0º ± 0.5º
		Takeoff	20º ± 0.5º
		Landing	35º + 1º,-0º
	Wing Flaps	Up	-3º ± 0.5º
		Takeoff	20º ± 0.5º
		Landing	38º + 1º,-0º

Serial Numbers Eligible

Eagle 150B serial numbers 016–042 and M1001-M1003 manufactured under the CASA (Australia) authority.

Eagle 150B serial numbers 043, 044, M1005 and subsequent manufactured under the DCA (Malaysia) authority.

Import Requirements

For airplanes manufactured under the CASA (Australia) authority:

A United States Standard Airworthiness Certificate may be issued in the "VLA - Special Class" category on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority (CASA) containing the following statement: "The aircraft covered by this certificate has been examined, tested and found to comply with the Master Documentation List Eagle 150B Issue 5 dated September 25, 1998 or later CASA approved revision (through Issue 7 dated November 8, 1999) approved under US Type Certificate No. A00005LA and to be in condition for safe operation".

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

For airplanes manufactured under the DCA (Malaysia) authority:

A United States Standard Airworthiness Certificate may be issued in the "VLA - Special Class" category on the basis of a Malaysian Export Certificate of Airworthiness signed by a representative of the Department of Civil Aviation (DCA) containing the following statement: "The aircraft covered by this certificate has been examined, tested and found to comply with the Master Documentation List MDL 2002-A1, Revision 1 dated January 2, 2002 or later DCA approved revisions approved under US Type Certificate No. A00005LA and to be in condition for safe operation".

The US airworthiness certification basis for this airplane type certificated under 14 CFR part 21, § 21.29 and exported by the country of manufacture is § 21.183(c).

Certification Basis

14 CFR part 21, § 21.17(b) using Joint Aviation Requirements - Very Light Aeroplanes (JAR-VLA) at Amendment 0 dated 26 April 1990, through Amendment VLA/92/1; § 21.29; and 14 CFR part 36 through amendment 36-21 effective December 28, 1995.
Noise Control Act of 1972.
Eligible for day-VFR operations and normal category maneuvers only.

Production Basis

See Import Requirements.

Serial Numbers Eligible

Eagle 150B serial numbers 016–042 and M1001-M1003 manufactured under the CASA (Australia) authority.

Eagle 150B serial numbers 043, 044, M1005 and subsequent manufactured under the DCA (Malaysia) authority.

Import Requirements

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For airplanes manufactured under the DCA (Malaysia) authority:

A United States Standard Airworthiness Certificate may be issued in the "VLA - Special Class" category on the basis of a Malaysian Export Certificate of Airworthiness signed by a representative of the Department of Civil Aviation (DCA) containing the following statement: "The aircraft covered by this certificatehas been examined, tested and found to comply with the Master Documentation List MDL 2002-A1, Revision 1 dated January 2, 2002 or later DCA approved revisions approved under US Type Certificate No. A00005LA and to be in condition for safe operation".

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

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Noise Control Act of 1972.
Eligible for day-VFR operations and normal category maneuvers only.

Production Basis

See Import Requirements.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations(see Certification Basis) must be installed in the airplane for certification. In addition,the Pilot's Operating Handbook & FAA Approved Airplane Flight Manual (AFM) [POH & FAA Approved AFM], document FM 150B (USA), amendment 0 dated 11 February, 1999 or later approved revision, must be carried.

The list of basic required equipment for day-VFR operation is contained in the POH & FAA Approved AFM.

Installation of the following Service Bulletins is required for US operations:
Service Bulletin 1048 – Anti-collision Light
Service Bulletin 1049 – Imperial Units Placards Service
Bulletin 1050 – Northern Hemisphere CompassService
Bulletin 1051 – US Gallons Fuel Gauge Service Bulletin
1052 - External Aircraft ID Plate
Service Bulletin 1058 - Optional Replacement of Cabin Air Vent (for airplane serial numbers 016 - 018 only)

Service Information and Manual Approvals	Service bulletins, airplane flight manuals, and overhaul and maintenance manuals, which are approved by the DCA Malaysia (or CASA Australia prior to May 31, 2002),are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

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 airplane at the time of original certification. The Certificated Empty Weight and the corresponding Center of Gravity location must include full oil (11.1 lbs. at 27.1inches) and unusable fuel (7.9 lbs. at 111.5 inches).
Note 2	The placards specified in the POH & FAA Approved AFM must be displayed at the appropriate locations.
Note 3	Information pertaining to service life limited parts is contained in the EAGLE 150B Service Manual, Section 4, 'Airworthiness Limitations'. The safe life limit for the airframe is 10,000 flight hours.
Note 4	All external portions of the airplane structure exposed to sunlight must be painted predominately white except for areas of markings and warning marks. The paint and primer must conform to the approved specifications listed in the Eagle 150B Service Manual, Section 4, 'Airworthiness Limitations'.
Note 5	The original Eagle 150B configuration is certificated with a maximum weight of 1411 lbs. and a maximum engine speed of 2800 rpm. The required airplane flight manual forthese airplanes is POH & FAA Approved AFM, document number FM 150B (USA), amendment 0, dated 11 February 1999 or amendment 1, dated 14 May 1999. These airplanes are eligible to be operated at the revised maximum weight (1433 lbs.)and a reduced maximum engine speed (2790 rpm) when amendment 2, dated July 17, 2000 or later approved revision, is incorporated into POH & FAA Approved AFM, FM 150B (USA).

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