DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A12EU
Revision 3
Rinaldo. Piaggio
PD 808/526
March 2, 2010

TYPE CERTIFICATE DATA SHEET NO. A12EU

This data sheet, which is a part of type certificate No. A12EU, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder	Industrie Aeronautiche e Meccaniche Rinaldo Piaggio S.P.A. (formerly Piaggio & Co.) Genoa, Italy

I. Piaggio-Douglas Model PD 808/526 (Transport Aircraft), Approved November 27, 1968

Engines	2 Bristol Siddeley Viper 526 turbine engines	
Fuel	Aviation Kerosene Specification:	
	American A.S.T.M. D1655/64T Jet A or A-1	
	British D.Eng. R.D. 2482 or 2494	
	Aviation Wide-Cut Specification:	
	American A.S.T.M. D1655/64T Jet B	
	British D. Eng. R.D. 2486	
Oil	ESSO TJ.15 and ESSO Extra 274 ENCO TJ.15 and ENCO Extra 274 Mobil Jet II, Castrol 98, Aero Shell 390	
Engine Limits	Take-off static thrust, standard day sea level	(100%) 3330 lb
	Maximum continuous thrust, standard day sea level	(98.5%) 3100 lb
	Maximum permissible engine rotor operating speed	100% 13760 RPM
	Maximum overspeed (20 second limit)	103%
	Ground Idling	40 - 41%
	Maximum permissible turbine outlet gas temperature:	
	Take-off (5 minute limit)	740°C
	Maximum continuous	715°C
	Starting (5 second limit)	800°C
	Ground idling	645°C
	Maximum permissible oil inlet temperature:	
	Continuous operation	125°C
	Maximum permissible air bleed extraction of primary engine airflow	7.5%

Airspeed Limits (IAS)

V_{MO} (Maximum operating)	
Sea level	340 kts
19500 feet	352 kts
M_{MO} (Maximum operating)	
19500 feet and above	M = 0.75 (IMN)
V_A (Maneuvering)	
18300 lb gross weight	280 kts
15500 lb gross weight	250 kts
13000 lb gross weight	230 kts
V_{FE} (Flap Speed)	
20° down	220 kts
40° down	185 kts
V_{LE} (Landing gear extended speed)	220 kts
V_{LO} (Landing gear operating speed)	200 kts
V_{MCG} (Minimum control speed, ground) sea level	
ISA - 50°C	89 kts
V_{MCA} (Minimum control speed air) is below the stall speed	
Tire limit ground speed (Nose landing gear) (Take-off)	157 kts

Datum

Fuselage station “0”, 38 inches forward of cut for sliding nose.

Mean Aerodynamic Chord (MAC)

74.6 inches. Leading edge of MAC is located at fuselage station 216.5 inches.

C.G. Range (gear extended)

WEIGHT	FORWARD		AFT	
(Pounds)	% MAC	Inches	% MAC	Inches
18,300	21.0	+232.16	24.5	+234.78
16,000	22.0	+232.91	-	-
14,500	-	-	27.5	+237.00
13,000	-	-	27.5	+237.00
12,500	17.5	+229.55	-	-
11,000	17.5	+229.55	-	-
10,000	19.4	+231.00	24.8	+235.00

Straight line variation between points given

Leveling Means

Longitudinally - Fuselage right side between station 336.50 inches to 351.0 inches.
Laterally - Fuselage station 321.4 inches.

Maximum Weight

Ramp	18,300 lb
Take-off (brake release)	18,000 lb
Landing	16,000 lb
Zero Fuel	13,000 lb

Minimum Crew

Two Pilot and Co-pilot

Maximum Passengers

Nine

		Weight lb.	Arm Inches
Maximum Baggage (5 passengers version)	Forward compartment:	140	128.74
	Rear compartment:	100	274.31
Maximum Baggage (9 passengers version)	Forward compartment:	140	143.31

Fuel Capacity

Usable fuel (See NOTE 1 for unusable fuel)

Location	Volume U.S. Gals.	Arm Inches
Right or left tank (wing plus tip) (each)	485	
Wing (right or left) (each)	248	245.78
Tip (right or left) (each)	237	226.56

Oil Capacity

Maximum oil system capacity (See NOTE 1 for unusable oil)

Location	Volume U.S. Gals.	Arm Inches
No. 1	1.94	308.14
No. 2	1.94	308.14

Maximum operating altitude

40,000 feet

Other operating limitations

Aircraft shall be operated in compliance with the operating limitations specified on the R.A.I. Approved Airplane Flight Manual.

Control Surface Movements

Surface		Travel	Tolerance
Aileron	Up	16°	± 1°
	Down	16°	
Aileron tabs (trim on left side only)			
Left side	Up	32°	± 2°
	Down	36°	
Right side	Up	20°	± 2°
	Down	20°	
Rudder	Left	27°	± 1°
	Right	27°	
Rudder trim tabs	Left	25°	± 1°
	Right	25°	
Elevator	Up	20°	± 1°
	Down	10°	
Elevator trim tab	Up	22°	± 2°
(Electrical)	Down	27°	
Elevator trim tab	Up	8°	± 2°
(Mechanical)	Down	12°	
Flaps	Down	40°	± 2°
Speed brakes	Down	45°	± 2°
Spoilers	Up	60°	± 2°

Serial Numbers Eligible

A Registro Aeronautico Italiano (R.A.I.) Certificate of Airworthiness for Export, endorsed as noted below under Import Requirements, must be submitted for each individual aircraft for which application for certification is made.

Certification Basis

FAR 21.29 and CAR 4b dated December 1953; Amendments 4b-1 through 4b-11 thereto; the provisions of Special Civil Air Regulation SR-422B; the Special Conditions listed in Attachment A to FAA letter to the Registro Aeronautico Italiano (R.A.I.) dated May 11, 1966.

Type Certificate (Import) No. A12EU issued November 27, 1968.
(See NOTE 3)

Date of Application December 7, 1961

Compliance with the following additional requirements has been established: Amendment 4b-12 Sections 4b.1 thru 4b.191, 4b.334 (e), 4b.413 thru 4b.447 (except 4b.437), 4b.450 thru 4b.454, 4b.603 thru 4b.612, 4b.622 thru 4b.634, 4b.642, 4b.643,

4b.711, 4b.718, 4b.738 and 4b.740.

Amendment 4b.14; FAR 25 - Amendment 25 - 15

FAA exemption No. 769 (Grant exemption from CAR 4b.437).

The R.A.I originally type certificated this aircraft under its type certificate. The FAA validated this product under U.S. Type Certificate Number A12EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the R.A.I.

Import Requirements

A U.S. Certificate of Airworthiness may be issued on the basis of an Italian Certificate of Airworthiness for Export signed by a representative of the Registro Aeronautico Italiano containing the following statement: "The airplane covered by this certificate has been examined and found to comply with U.S. Civil Air Regulations Part 4b issued December 31, 1953, including Amendments 4b-1 thru 4b-11, additional requirements as stated under Certification Basis of Type Certificate Data Sheet A12EU, and conforms to Type Certificate A12EU."

The FAA can issue a U.S. airworthiness certificate based on an R.A.I. Export Certificate of Airworthiness (Export C of A) signed by a representative of the R.A.I. on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to conform to the type design approved under U.S. Type Certificate No A12EU and to be in a condition for safe operation.'

Required Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the aircraft for certification.
A required Equipment List is provided in the R. Piaggio Report No. 9008 dated November 16, 1966, and is available upon request from the manufacturer.
A current R.A.I. - Approved Airplane Flight Manual for the Model PD 808/526 must be carried on the aircraft at all times.

Service Information

All Service Bulletins are approved by R.A.I. and carry a statement to that effect.

NOTE 1

(a) A current Weight and Balance Report including list of equipment included in certificated empty weight, and loading instructions, must be in each aircraft at the time of original certification and at all times thereafter.

(b) The airplane must be loaded so that the C.G. is within the specified limits at all times.

(c) The weight of system fuel and oil as defined below and hydraulic fluid must be included in the empty weight of the airplane.

System Fuel	U.S. Gals.	Arm inches
Unusable fuel	16	260.00
Undrainable fuel (trapped in tanks & lines)	4	260.00

System Oil	U.S. Gals.	Arm inches
Unusable oil (both engines)	1.8	308.14
Undrainable oil	Negligible	

NOTE 2

The service life limits for aircraft structural parts which are fatigue critical are listed in the Approved Airplane Flight Manual.

NOTE 3

Piaggio Model PD 808, Approved November 29, 1966 withdrawn November 27, 1968, since Bristol Siddeley Viper 525 engines are not installed on any PD 808 airplanes.

NOTE 4 SERVICE INFORMATION:

Each of the documents listed below that contain a statement that it is approved by the European Aviation Safety Agency (EASA) - or for approvals made before September 28, 2003 - by the R.A.I., are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

- Industrie Aeronautiche e Meccaniche Service Bulletins, except as noted below,
- Structural repair manuals,
- Vendor manuals referenced in Industrie Aeronautiche e Meccaniche*J*service bulletins
- Aircraft flight manuals,
- Repair Instructions.

Design changes that are contained in Service Bulletins and are classified as level 1 major in accordance with the US Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness must be approved by the FAA.

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