DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A43EU
Revision 12
Airbus Defense and
Space S.A.
Model: C-212-CB
C-212-CD
C-212-CE
C-212-CF
C-212-DF
C-212-DE
July 23, 2021

TYPE CERTIFICATE DATA SHEET NO. A43EU

This data sheet, which is a part of Type Certificate No. A43EU, 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 Airbus Defense and Space S.A.

(formerly known as Construcciones Aeronauticas, S.A.)

Apartado 193 Madrid, Spain

I - Model C-212-CB (Transport Category Airplane) approved February 22, 1977

Engines 2- Garrett Turbine Engine Co. Model TPE331-5-251C Turboprop engines.

Fuel Prop. Shaft/Eng. Rotor Ratio: 1/26.2287.

See Airplane Flight Manual for approved fuels, alternate fuels and approved fuel

additives.

Oil Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and

Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESHP	RPM (%)	ITT (°C)
Takeoff (5 minutes)	750	808	100	923
Max. Continuous	715	776	100	923

Transient temperature (ITT) limit (1 sec.) 1149°C.

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% RPM is defined as 41,730 engine rotor speed, 1591 propeller shaft speed.

See INTA-approved Airplane Flight Manual, Document D.T. 76-2501, for additional

information.

Propeller and Propeller Limits 2 Hartzell Model HC-B4TN-5CL, constant speed hydraulic full feathering reversible

propellers.

Blades: 4, Model LT 10282 HB + 4

Diameter: 107.5 in.

Hard and soft alloy blades of the same model designation may not be intermixed. For % R. P.M. at windmilling see INTA-approved Airplane Flight Manual

Document D.T. 76-2501.

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I - Model C-212-CB (cont'd)

Blade angle measured at 30-in. radius station:

Full Reverse $-6.5^{\circ} \pm 0.5^{\circ}$

Airspeed Limits V_{MO} (Max. Operating) (S.L. -25000 ft) Speed Knots IAS V_{A} (Maneuvering) (S.L. -25000 ft) 146

V_{FE} (Flaps Extended) Takeoff 25% 125 Approach 50% 120 Landing 100% 100

V_{MC} (Min. control speed)

C.G. Range

Weight (lb)	FWD % MAC	AFT % MAC
14332	17.4	30.0
13781	16.9	30.0
12678	16.0	30.0

Straight line variation between points given.

Datum A jig point is located in forward fuselage Frame No. 3 and marked on the underside of

the fuselage. The C.G. reference datum is situated 43.90 in. forward of the jig point.

M.A.C. Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in. aft of datum.

Leveling Means Plumb-bob provision on aft face of aft cockpit compartment bulkhead.

Maximum Weights Takeoff: 14332 lb.

Landing: 13781 lb. MZFW: 13230 lb.

Minimum Crew The minimum flight crew is two pilots.

Maximum Passengers 19 - limited by Emergency Exit Requirements of FAR 25.807 (c)

Maximum Baggage Aft baggage comp: 662 lb. total - maximum floor loading: 120 lb/sq. ft

470 lb/linear ft.

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Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight

and Balance Supplement to the INTA-approved Airplane Flight Manual.

Fuel Capacity Total Capacity: 548.00 U.S. gal. in two wing tanks

Usable fuel: 528.00 U.S. gal. Unusable fuel: 20.00 U.S. gal.

(See NOTE I (b) and I (c) for data on system fuel and oil)

Oil Capacity Usable oil: 5.25 U.S. quarts in each engine tank

Unusable oil: (NONE)

Maximum Approved Operating

Altitude 25,000 ft.

I - Model C-212-CB (cont'd)

Control Surface Movement

Elevator	30°	Up	20°	Down
Elevator trim tab	15.5°	Up	21°	Down
Rudder	25°	Right	25°	Left
Rudder trim tab	17.5°	Right	19°	Left
Aileron	20°	Up	20°	Down
Aileron trim tab	15°	Up	15°	Down
Flaps, Inner and Outer	10°	Down - takeoff		
	20°	Down - approach		
	40°	Down - landing		

All measurements taken at trailing edge from neutral position. For details of tolerance on control surface movement refer to document D.T. 77.2101.

II. Model C-212-CC (Transport Category Airplane) approved May 16, 1980

The C-212-CC Model is similar to the C-212-CB Model except for powerplant installation, gross weight and seating capacity.

Engines

2 - Garrett Turbine Engine Co. Model TPE331-10-501C or TPE331-10R-501C Turboprop engines, or 2 - Model TPE331-10-511c or TPE311-10R-511C Turboprop engine.

Prop. Shaft/Eng. Rotor Ratio: 1/26.2287

Fuel

See AFM for approved fuels, alternate fuels and approved fuel additives.

Oil

Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESH P	% RPM	EGT (°C)
Takeoff (initial) (5 minutes)	900	944	100	650
Takeoff (APR on) (5 minutes)	900	944	100	650
Max. Continuous	900	944	100	650

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% RPM is defined as 41,730 rpm engine rotor speed, 1591 rpm propeller shaft speed.

Transient temperature (EGT) limit (1 sec.): 770°C

 $See\ INTA-approved\ Airplane\ Flight\ Manual,\ Document\ D.T.\ 78-2501,\ for\ additional$

information.

Propeller and Propeller Limits

2 Hartzell Model HC-B4MN-5AL, constant speed hydraulic full feathering, reversible propellers.

Blades: 4, Model LM 10585 B + 4

Diameter: 110 in.

For %RPM as windmilling see INTA-approved Airplane Flight Manual, Document D.T. 78-2501.

Blade angle measured at 42- in. radius station:

 $\begin{tabular}{ll} Feathered & 83.0^{\circ} \pm 1.0^{\circ} \\ Flight Idle & 7.0^{\circ} \pm 0.3^{\circ} \\ Start Locks & -1.5^{\circ} \pm 0.2^{\circ} \\ Full Reverse & -10^{\circ} \pm 0.5^{\circ} \\ \end{tabular}$

II. Model C-212-CC (cont'd)

Speed Knots IAS V_{MO} (Max. Operating) (S.L. -25.000 ft) 200 Airspeed Limits 146 $V_{\boldsymbol{A}}$ (Maneuvering) (Flaps extended) Takeoff 25% 135 Approach 37.5% 130 Landing 100% 115 V_{MC} (Min. Control) 85

C.G. Range

1	Weight	FWD	AFT
	(lb)	% MAC	% MAC
]	16,976	16.00	30.00
]	16,424	15.90	30.00
]	11,051	15.00	30.00
	9,481	15.00	30.00

Straight line variation between points given.

Datum A jig point is located in forward fuselage Frame No. 3 and marked on the underside of

the fuselage. The C.G. reference datum is situated 43.90 in. forward of the jig point.

M.A.C. Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in. aft of datum.

Leveling Means Plumb-bob provisions on aft fact of aft cockpit compartment bulkhead.

Maximum Weights Ramp: 17,086 lb.

Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb.

Minimum Crew The minimum flight crew is two pilots

Maximum Baggage Aft baggage comp.: 882 lb. Total - maximum floor loading: 120 lb/sq. ft.

470 lb/linear ft.

Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight

and Balance Supplement to the INTA-approved Airplane Flight Manual.

Fuel Capacity: 548.00 U.S. gal. in two wing tanks

Usable fuel: 528.00 U.S. gal. Unusable fuel: 20.00 U.S. gal.

(See NOTES 1 (b) and 1 (c) for data on system fuel and oil).

Oil Capacity Usable oil: 5.25 U.S. quarts in each engine tank

Unusable oil: (NONE)

Maximum Approved Operating

Altitude 25,000 ft.

II. Model C-212-CC (cont'd)

Control Surface Movements

Elevator	30°	Up	20°	Down
Elevator Trim Tab	15.5°	Up	21°	Down
Rudder	27.5°	Right	27.5°	Left
Ruddeer Trim Tab	12.5°	Right	19°	Left
Aileron	20°	Up	15°	Down
Aileron Trim Tab	15°	Up	15°	Down
Flaps, Inner and Outer	10°	Down - Takeoff		
	150	Down Approach		

15° Down - Takeon
15° Down - Approach
40° Down - Landing

All measurements taken at trailing edge from neutral position. For details of tolerances on control surface movement refer to document D.T. 77-2101.

Maximum Passengers

28 - limited by space available for accommodation.

III. Model C-212-CD (Transport Category Airplane) approved September 6, 1985

The C-212-CD model is similar to the C-212-CC Model except for powerplant installation.

Turboprop engines.

Engines

2 - Garrett Turbine Engine Co. Model TPE331-10R-502C or TPE331-10R-512C

(See NOTES 5 & 6)

Prop. Shaft/Eng. Rotor Ratio: 1/26.2287

Fuel

See AFM for approved fuels, alternate fuels and approved fuel additives.

Oil

Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESHP	% RPM	EGT (°C)
Takeoff (initial) (5 minutes)	900	944	100	650
Takeoff (APR on) (5	900	944	100	650
minutes)				
Max. Continuous	900	944	100	650

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% RPM is defined as 41.730 rpm engine rotor speed, 1591 rpm propeller shaft speed.

Transient temperature (EGT) limit (1 sec.): 770°C.

See INTA-approved Airplane Flight Manual, Document D.T. 83-2501, for additional information.

Propeller and Propeller Limits

2 Dowty Rotol Model (c) R.334/4-82-F/13 hydraulic full feathering, constant speed reversible propellers.

Blades: 4, serial number 660709314

Diameter: 110 in.

For % RPM at windmilling see INTA-approved Airplane Flight Manual, Document D.T. 83-2501.

Blade angle measured at 35.333 in radius station:

Feathered 82°30' \pm 20' Flight Idle 9° \pm 20' Start Locks $-1^{\circ}45' \pm 0^{\circ}30'$ Full Reverse $-13^{\circ} \pm 1^{\circ}$

III. Model C-212-CD (cont'd) Speed Knots IAS (S.L. -25,000 ft.) Airspeed Limits V_{MO} (Max. Operating) 200 146 $V_{\rm A}$ (Maneuvering) (Flaps Extended) 135 V_{FE} Takeoff 25% 130 Approach 37.5% Landing 100% 115 V_{MC} (Min. Control) 85 C.G. Range **FWD** Weight **AFT** % MAC (lb) % MAC 16,976 16.0 30.0 16,424 15.9 30.0 11,051 15.0 30.0 9,481 15.0 30.0 Straight line variation between points given. Datum A jig point is located in forward fuselage Frame No. 3 and marked on the underside of the fuselage. The C.G. reference datum is situated 43.90 in. forward of the jig point. M.A.C. Length is 86.22 in. The leading edge of M.A.C. is 215.04 in. aft of datum. Leveling Means Plumb-bob provisions on aft face cockpit compartment bulkhead. Maximum Weights 17,086 lb. Ramp: Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb. Minimum Crew The minimum flight crew is two pilots. Aft baggage comp.: 882 lb. Total - maximum floor loading: 120 lb/sq. ft. Maximum Baggage 470 lb/linear ft. Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight and Balance Supplement to the INTA-approved Airplane Flight Manual. Fuel Capacity Total capacity: 548.00 U.S. Gal. in two wing tanks Usable fuel: 528.00 U.S. Gal. Unusable fuel: 20.00 U.S. Gal. (See NOTES 1 (b) and 1 (c) for data on system fuel and oil). Oil Capacity Usable Oil: 5.25 U.S. quarts in each engine tank Unusable Oil: None Maximum Approved Movement 25,000 ft. Control Surface Movement Elevator 30° Up 20° Down 31° Elevator Trim Tab 15.5° Up Down Rudder 27.5° Right 27.5° Left Rudder Trim Tab 12.5° Right Left 20° Aileron 20° Up Down 15° 15° Aileron Trim Tab Up Down Flaps, Inner and Outer 10° Down - Takeoff 15° Down - Approach 40° Down - Landing

All measurements taken at trailing edge from neutral position. For details of tolerances

on control surface movement refer to document D.T. 77-2101.

Maximum Passengers 28 - limited by space available for accommodation.

IV. Model C-212-CE (Transport Category Airplane) approved September 9, 1985

The C-212-CE model is similar to the C-212-CD model except for incorporation of CASA Modification No. PP0956 or PP1012 which enables engine operation at a higher Takeoff (APR on) rating.

Engines

(See NOTES 5 & 6)

2 - Garrett Turbine Engine Co. Model TPE331-10R-502C or TPE331-10R-512C $\,$

Turboprop engines.

Prop. Shaft/Eng. Rotor Ratio: 1/26.2287

Fuel

See AFM for approved fuels, alternate fuels and approved fuel additives

Oil

Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESHP	% RPM	EGT (°C)
Takeoff (initial) (5 minutes)	900	944	100	650
Takeoff (APR on) (5	925	970	100	650
minutes)				
Max. Continuous	900	944	100	650

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% is defined as 41,730 rpm engine rotor speed, 1591 rpm propeller shaft speed.

Transient temperature (EGT) limit (1 sec.): 770°C.

See INTA-approved Airplane Flight Manual, Document D.T. 84-2501, for additional information.

Propeller and Propeller Limits

2 Dowty Rotol Model (c) R.334/4-82-F/13 hydraulic full feathering, constant speed

reversible propellers.

Blades: 4. serial number 660709314

Diameter: 110 in.

For % RPM at windmilling see INTA-approved Airplane Flight Manual, Document D.T.

84-2501.

Blade angle measured at 35.333 in radius station:

Feathered 82°30' \pm 20' Flight Idle 9° \pm 20' Start Locks -1°45' to 0°30' Full Reverse -13° \pm 1°

Airspeed Limits

			Speed Knots IAS
$V_{MO} \\$	(Max. Operating)	(S.L25.000 ft)	200
$V_{\rm A}$	(Maneuvering)		146
$V_{\text{FE}} \\$	(Flaps extended)	Takeoff 25%	135
		Approach 37.5%	130
		Landing 100%	115
$V_{MC} \\$	(Min. Control)		88

C.G. Range

Weight	FWD	AFT
(lb)	% MAC	% MAC
16,976	16.0	30.0
16,424	15.9	30.0
11,051	15.0	30.0
9,481	15.0	30.0

Straight line variation between points given.

IV. Model C-212-CE (cont'd)

Datum A jig point is located in forward fuselage Frame No. 3 and marked on the

underside of the fuselage. The C.G. reference datum is situated 43.90 in. forward of the

jig point.

M.A.C. Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in. aft of datum.

Leveling Means Plumb-bob provisions on aft fact of aft cockpit compartment bulkhead.

Maximum Weights Ramp: 17,086 lb.

Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb.

Minimum Crew The minimum flight crew is two pilots.

Maximum Baggage Aft baggage comp.: 882 lb. Total - Maximum floor loading: 120 lb/sq. ft.

470 lb/linear ft.

Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight and Balance Supplement to the INTA-approved Airplane Flight Manual.

Fuel Capacity Total capacity: 548.00 U.S. Gal. in two wing tanks

Usable fuel: 528.00 U.S. Gal. Unusable fuel: 20.00 U.S. Gal.

(See NOTES 1 (b) and 1 (c) for data on system fuel and oil).

Oil Capacity Usable oil: 5.25 U.S. quarts in each engine tank

Unusable oil: None

Maximum Approved Operating

Altitude 25,000 ft.

Control Surface Movements Elevator 30° Up 20° Down

31° Elevator Trim Tab 15.5° Up Down Rudder 27.5° Right 27.5° Left Rudder Trim Tab 19° 12.5° Right Left Aileron 20° 20° Up Down Aileron Trim Tab 15° 15° Up Down

Flaps, Inner and Outer 10° Down - Takeoff 15° Down - Approach

40° Down - Landing

All measurements taken at trailing edge from nuetral position. For details of tolerance on

control surface movement refer to document D.T. 77-2101.

Maximum Passengers 28 - limited by space available for accommodation.

V. Model C-212-CF (Transport Category Airplane) approved December 6, 1985

The C-212-CF model is similar to the C-212-CC model with the same engine except for incorporation of CASA Modification No. PP0956 or PP1012 which enables engine operation at a higher Takeoff (APR on) rating.

Engines

2 - Garrett Turbine Engine Co. Model TPE331-10R-501C or TPE331-10R-511C

Turboprop engines.

Prop. Shaft/Eng. Rotor Ratio: 1/26.2287

Fuel

See AFM for approved fuels, alternate fuels and approved fuel additives.

Oil

Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and

Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESHP	% RPM	EGT (°C)
Takeoff (initial) (5 minutes)	900	944	100	650
Takeoff (ARP on) (5	925	970	100	650
minutes)				
Max. Continuous	900	944	100	650

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% is defined as 41,730 rpm engine rotor speed, 1591 rpm propeller shaft speed.

Transient temperature (EGT) limit (1 sec.): 770°C.

See INTA-approved Airplane Flight Manual, Document D.T. 84-2502, for additional information.

Propeller and Propeller Limits

2 - Hartzell Model HC-B4MN-5AL, constant speed, hydraulic, full feathering, reversible propellers.

Blades: 4, Model LM10585B + 4

Diameter: 110 in.

For % RPM at windmilling see INTA-approved Airplane Flight Manual, Document D.T. 84-2502.

Blade angle measured at 42 in. radius station:

Feathered $83.0^{\circ} \pm 1.0^{\circ}$ Flight Idle $7.0^{\circ} \pm 0.3^{\circ}$ Start Locks $-1.5^{\circ} \pm 0.2^{\circ}$ Full Reverse $-10^{\circ} \pm 0.5^{\circ}$

Airspeed Limits

$V_{MO} \\$	(Max. Operating)	(S.L25,000 ft.)	200
$V_{\rm A}$	(Maneuvering)		146
$V_{\text{FE}} \\$	(Flaps Extended)	Takeoff 25%	135
		Approach 37.5%	130
		Landing 100%	115
$V_{MC} \\$	(Min. Control Speed)		88

Speed Knots IAS

C.G. Range

Weight	FWD	AFT
(lb)	% MAC	% MAC
16,976	16.0	30.0
16,424	15.9	30.0
11,051	15.0	30.0
9,481	15.0	30.0

Straight line variation between points given.

V. Model C-212-CF (cont'd)

Datum A jig point is located in forward fuselage Frame No. 3 and marked on the underside

of the fuselage. The C.G. reference datum is situated 43.90 in. forward of the jig point.

M.A.C. Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in aft of datum.

Leveling Means Plumb-bob provisions on aft face of act cockpit compartment bulkhead.

Ramp: 17,086 lb. Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb.

Minimum Crew The minimum flight crew is two pilots

Maximum Baggage Aft baggage comp.: 882 lb. Total - Maximum floor loading: 120lb/sq. ft.

470 lb/linear ft.

Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight

and Balance Supplement to the INTA-approved Airplane Flight Manual.

Fuel Capacity Total capacity: 548.00 U.S. Gal in two wing tanks

Usable fuel: 528.00 U.S. Gal. Unusable fuel: 20.00 U.S. Gal.

(See NOTE 1 (b) and 1 (c) for data on system fuel oil).

Oil Capacity Usable oil: 5.25 U.S. quarts in each engine tank.

Unusable oil: None

Maximum Approved Operating

Altitude 25,000 ft.

Control Surface Movements Elevator 30° Up 20° Down

Elevator Trim Tab 15.5° Up 31° Down Rudder 27.5° Right 27.5° Left Rudder Trim Tab 12.5° Right 19° Left Aileron 20° 20° Up Down Aileron Trim Tab 15° Up 15° Down

Flaps, Inner and Outer 10° Down - Takeoff 15° Down - Approach

40° Down - Landing

All measurements taken at trailing edge from neutral position. For details of tolerance on

control surface movement refer to document D.T. 77-2101.

Maximum Passengers 28 - limited by space available for accommodation.

VI. Model C-212-DF (Transport Category Airplane) approved March 30, 1989

The C-212-DF model is similar to the C-212-CE except by the modification in the nose, wingtips and vertical tail.

Engines 2 - Garrett Turbine Engine Co. Model TPE331-10R-502C or TPE331-10R-512C or

(See NOTE 7 & 8) TPE331-10R-513C.

Prop. Shaft/Eng Rotor Ratio: 1/26.2287.

VI. Model C-212-DF (cont'd)

Fuel

See AFM for approved fuels, alternate fuels and approve fuel additives.

Oil

Oils conforming to Garrett Turbine Engine Co. Specification EMS 53110 (Type I and Type II). See approved AFM for a list of approved engine lubricating oils.

Engine Limits

Conditions	SHP	ESHP	% RPM	EGT (°C)
Takeoff (initial)(5 minutes)	900	944	100	650
Takeoff (APR on) (5	925	970	100	650
minutes)				
Max. Continuous	900	944	100	650

Transient overspeed limits: 105.5% for 30 sec.; 106% for 5 sec.

100% RPM is defined as 41,730 rpm engine rotor speed, 1591 rpm propeller shaft speed.

Transient temperature (EGT) limit (1 sec.): 770°C.

See DGAC-approved Airplane Flight Manual, Document D.T. 88-2509 for additional information.

Propeller and Propeller Limits

2 Dowty Rotol Ltd, Model (c) R.334/4-82-F/13, hydraulic full feathering, constant speed, reversible propellers.

Blades: 4, serial number 660709314

Diameter: 110 in.

For % RPM at windmilling see DGAC-approved Airplane Flight Manual, Document D.T. 88-2509.

Blade angle measured at 35.333-in. radius station:

Airspeed Limits

			Speed Knots IAS
V_{MO}	(Max. Operating)	(S.L25,000 ft.)	200
$V_{\rm A}$	(Maneuvering)		146
V_{FE}	(Flaps Extended)	Takeoff 25%	135
		Approach 25%	135
		Landing 100%	115
$V_{MC} \\$	(Min. Control)		76

C.G. Range

Weight	FWD	AFT
(lb)	% MAC	% MAC
16,976	16.0	30.0
16,424	15.9	30.0
11,051	15.0	30.0
9,481	15.0	30.0

Straight line variation between points given.

Datum

A jig point is located in forward fuselage Frame No. 3 and marked on the underside of the fuselage. The C.G. reference datum is situated 43.90 in. forward of the jig point.

M.A.C.

Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in. aft of datum

VI. Model C-212-DF (cont'd)

Leveling Means Plumb-bob provisions on aft face of aft cockpit compartment bulkhead.

Maximum Weight Ramp: 17,086 lb.

Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb.

Minimum Crew The minimum crew is two pilots.

Maximum Baggage Aft baggage comp.: 882 lb. Total - maximum floor loading: 120 lb/sq. ft.

470 lb/linear ft,

Fwd baggage comp.: 309 lb. total

Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight

and Balance Supplement to the DGAC-approved Airplane Flight Manual.

Fuel Capacity Total Capacity: 548.00 U.S. Gal. in two wing tanks

Usable Fuel: 528.00 U.S. Gal. Unusable Fuel: 20.00 U.S. Gal.

(See NOTES 1 (b) and 1 (c) for data on system fuel and oil).

Oil Capacity Usable oil: 5.25 U.S. quarts in each engine tank

Unusable oil: None

Maximum Approved Operating

Altitude 25,000 ft.

Control Surface Movements Elevator 30° Up 20° Down

Elevator Trim Tab 15.5° Up 31° Down Rudder 20° Right 24° Left Rudder Trim Tab 14° 14° Right Left Aileron 20° 20° Up Down 15° 15° Aileron Trim Tab Up Down

Flaps, Inner and Outer 10° Down - Takeoff

10° Down - Approach 40° Down - Landing

All measurements taken at trailing edge from neutral position. For details of tolerances

on control surface movement refer to document D.T. 77-2101.

Maximum Passengers 28 - Limited by space available for accommodation.

VII. Model C-212-DE (Transport Category Airplane) approved October 1, 1991

Engines 2 - Pratt and Whitney Canada, Model PT6A-65B turboprop engines

Propeller Shaft Gear Ratio: 0.0568:1

Fuel Refer to Engine Service Bulletin No. 3032845-72-44 (PWC SB 13044) for listing of

approved fuels

Oil Refer to Engine Service Bulletin No. 3032845-72-1 (PWC SB 13001) for listing of

approved oils.

VII. Model C-212-DE (cont'd)

Engine Limits

Conditions	SHP	ESHP	PROP	ITT
			% RPM	(°C)
Takeoff (initial) (5 minutes)	1000	1069	100	820
Max. Continuous	1000	1069	100	810

100% N_G is defined as 37,468 rpm.

100% N_P is defined as 1,700 rpm (which means a Power Turbine Speed of 29,894 rpm (N_F)).

Transient temperature (ITT) limit: 1000°C for 5 seconds.

See DGAC-approved Airplane Flight Manual, Document D.T. 88-2518, for additional information.

Propeller and Propeller Limits

2 McCauley Model 4HFR34C756/106LM, constant speed, hydraulic full feathering, reversible, propellers.

Blades: 4, Model 106LM

Diameter: 106 in.

Blade angle measured at 30 in. radius station:

Feathered $86.7^{\circ} \pm 0.5^{\circ}$ Beta pick-up $19.5^{\circ} \pm 0.2^{\circ}$ Flight Idle $15^{\circ} \pm 0.2^{\circ}$ Start Locks $7^{\circ} \pm 0.5^{\circ}$ Full Reverse $-10^{\circ} \pm 0.5^{\circ}$

Airspeed Limits

			Speed Knots IAS
V_{MO}	(Max. Operating)	(S.L25,000 ft.)	200
$V_{\rm A}$	(Maneuvering)		146
V_{FE}	(Flaps Extended)	Takeoff 25%	135
		Approach 25%	130
		Landing 100%	115
V_{MC}	(Min. Control)		76

C.G. Range

Weight	FWD	AFT
(lb)	% MAC	% MAC
16,976	16.0	30.0
16,424	15.9	30.0
11,051	15.0	30.0
9,481	15.0	30.0

Straight line variation between point given.

Datum

A jig point is located in forward fuselage Frame. No. 3 and marked on the underside of the fuselage. The C.G. reference datum is situated 43.9 in. forward to the jig point.

M.A.C.

Length is 86.22 in.

The leading edge of M.A.C. is 215.04 in. aft of datum

Leveling Means

Plumb-bob provisions on aft face of aft cockpit compartment bulkhead.

Maximum Weights

Ramp: 17,086 lb. Takeoff: 16,976 lb. Landing: 16,424 lb. MZFW: 15,653 lb.

VII. Model C-212-DE (cont'd)

The minimum flight crew is two pilots. Minimum Crew

Aft baggage compartment: 882 lb total Maximum Baggage

Fwd baggage compartment: 309 lb. total Maximum floor loading: 120 lb/sq. ft. 470 lb/linear ft.

Baggage and/or cargo load must comply with loading limitations of approved Airplane Flight Manual, and must be loaded in accordance with loading instructions of Weight

and Balance Supplement to the approved Airplane Flight Manual.

548.00 U.S. Gal. in two wing tanks Fuel Capacity Total capacity:

Usable fuel: 528.00 U.S. Gal. Unusable fuel: 20.00 U.S. Gal.

Oil Capacity Usable oil: 1.5 U.S. gallons in each engine tank

Unusable oil: 1 U.S. gallon

(See NOTES 1 (b) and 1 (c) for data on system fuel and oil).

Maximum Approved Operating

Altitude 25,000 ft.

Control Surface Movement Elevator 30° 20° Down Up

> Elevator Trim Tab 3° Up 8.6° Down Rudder 24.5° Right Left 21° Rudder Trim Tab 14° Right 14° Left 20° 20° Aileron Down Up Aileron Trim Tab 15° 15° Up Down

Flaps, Inner and Outer 10° Down - Takeoff 10°

Down - Approach 40° Down - Landing

All measurements taken at trailing edge from neutral position. For details of tolerance on

control surface movement refer to document D.T. 87-2104.

28 - Limited by space available for accommodation. Maximum Passengers

DATA PERTINENT TO ALL MODELS

Serial Nos. Eligible The Spanish Export Airworthiness Certificate endorsed as noted below under Import

Requirements must be submitted for each individual aircraft for which application for

FAA Airworthiness Certification is made except for S/N 64N and 73N.

The Indonesian Export Airworthiness Certificate endorsed as noted below under Import Requirements must be submitted for Airplanes S/N 64N and 73N produced by IPTN in Indonesia and validated by the Spanish Direccion General de Aviacion Civil (DGAC) (by letter dated December 23, 1986) for which application for FAA Airworthiness

Certification is made.

Import Requirements The U.S. Airworthiness certification basis for aircraft type certificated under FAR

Section 21.29 and exported by the country of manufacture is FAR Sections 21.183 (c) or

21.185 (c).

The U. S. Airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g.,

third party country) is FAR Section 21.183 (d) or 21.183 (b).

The FAA can issue a U.S. airworthiness certificate based on an Export Certificate of Airworthiness (Export C of A) signed by a representative of the Spanish DGAC 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 with the Type Design approved under U.S. Type Certificate No. A43EU and to be in a 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.

Certification Basis

FAR Part 25 effective February 1, 1965, including Amendments 25-1 through 25-35.

FAR Part 36 effective December 1, 1969, including Amendments 36-1 through 36-17.

CASA has elected to comply with the requirements of FAR 25.855 and 25.857 as amended by Amendment 25-60 for the forward cargo compartment of the C-212-DF and C-212-DE Models.

FAA Special Condition 25-100-NW-6, dated May 18, 1981, applicable to Models -CC, -CD, -CE, -CF and -DF.

SFAR 27 effective February 1, 1974, including amendments 27-1 through 27-6 as it applies to the fuel venting emissions requirements. Compliance has been demonstrated for Model -DF with the installation of CASA modification 212.510251 and for Model -DE with the installation of CASA drawing 212-54515.

Date of application for Type Certificate: September 7, 1974.

Type Certificate No. A43EU, issued February 22, 1977.

The Spanish DGAC originally type certificated these Construcciones Aeronauticas, S.A C-212 aircraft under its type certificate Number 01-82. The FAA validated these products under U.S. Type Certificate number A43EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the Spanish DGAC .

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) and listed in document Equipment List Report D.T. 77-2301, (Models -CC through -CF), D.T. 87-2523 (Model -DF) and D.T. 88-2315 (Model -DE) must be installed in the aircraft for certification.

In addition, the following is required:

- INTA-approved Airplane Flight Manual, Document No. D.T. 76-2501, applicable to C-212-CB Model.
- INTA-approved Airplane Flight Manual, Document No. D.T. 78-2501, applicable to C-212-CC Model, Revision 3 or later approved revisions.
- INTA-approved Airplane Flight Manual, Document No. D.T. 83-2501, applicable to C-212-DC Model.
- INTA-approved Airplane Flight Manual, Document No. D.T. 84-2501, applicable to C-212-CE Model.
- INTA-approved Airplane Flight Manual, Document No. D.T. 84-2502, applicable to C-212-CF Model.
- DGAC-approved Airplane Flight Manual, Document No. D.T. 88-2509, applicable to C-212-DF Model.

 DGAC-approved Airplane Flight Manual, Document No. D.T. 88-2518, applicable to C-212-DE Model.

Service Information

Each of the documents listed below must state that it is approved by EASA – or for approvals made before September 28, 2003 – by the Spanish DGAC. Any such documents are accepted by the FAA and are considered FAA approved. Additionally, approvals issued by Construcciones Aeronauticas, S.A.under the authority of EASA approved Design Organization EASA.21J.032 - or for approvals made before September 28, 2003 - under the authority of Spanish DGAC Design Organization Approval No. 1 are considered FAA approved. These approvals pertain to the type design only.

- TC holder Service Bulletins, except as noted below,
- Structural repair manuals
- Vendor manuals referenced in TC holder Service Bulletins
- Airplane flight manuals
- Repair instructions.

Note: Design changes that are contained in TC holder Service Bulletins and that are classified as Level 1 Major in accordance with either the US/Spain or US/EASA Bilateral Aviation Safety Agreement – Implementation Procedures for Airworthiness, must be approved by the FAA.

NOTES

NOTE 1

- (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.
- (b) Unusable fuel and system oil and all hydraulic fluid must be included in the certified weight. Unusable fuel is that quantity of fuel remaining in the system and in the tanks when the fuel quantity indicators read zero. The approved unusable fuel of 20.0 U.S. gal. (130.0 lbs.) is comprised of system and tank fuel determined under FAR 25.959.
- (c) System oil is the amount of oil required to fill the oil system and tanks up to its normal level.

NOTE 2

All placards presented in the limitations section of the approved Airplane Flight Manual must be installed in the appropriate location on the aircraft.

NOTE 3

- (a) The service life limits for aircraft structural parts which are fatigue critical are listed in the approved Airframe Maintenance Manual, Chapter 5.
- (b) Life limited parts for the Model TPE331-5-501C engine are listed in FAA-Approved Garrett Service Bulletin TPE331-72-0019 dated December 4, 1972, or later FAA-Approved revisions.
- (c) Life limited parts for the Model TPE331-10 and -10R series engines are listed in FAA-Approved Garrett Service Bulletins TPE331-72-0180, dated February 15, 1978, or later FAA-Approved revisions.
- (d) Life limited parts for the Model PT6A-65B engine are listed in DOT of Canada approved Service Bulletin 3032845-72-2 (PEC SB 13002) dated October 14, 1986, or later DOT-approved revisions.

NOTE 4

For the C-212-CC Model with the TPE331-10R-501C or -501C engines installed the INTA-approved Airplane Flight Manual, Document 78-25-1 Revision 7, dated January 8, 1982, or later approved revision is required.

NOTE 5

Engine Models TPE331-10-511C, TPE331-10R-511C and TPE331-10R-512C are the same as Models TPE331-10-501C, TPE331-10R-501C and TPE331-10R-502C with Garrett Service Bulletin No. TPE331-72-0395, effective April 1, 1983, Revision 1, dated November 10, 1983, or later revision incorporated and are eligible when CASA Service Bulletin 212-80-22 and 212-80-23 are incorporated upon installation of the later model engine.

NOTE 6 Operation of the C-212-CC and -CF Models with a TPE331-10-501C or TPE331-10R-501C engine on one side and a TPE331-10-511C or TPE331-10R-511C engine on the other side is authorized for a maximum of 300 hours after the later model engine is installed. Operation of the C-212-CD and -CE Models with a TPE331-10R-502C engine on one side and a TPE331-10R-512C engine on the other side is authorized for a maximum of 300 hours after the later model engine is installed. C-212-CC, -CD, -CE and -CE airplane performance is unaffected with mixed engine installed.

NOTE 7 Engine Model TPE-331-10R-513C is the same as Model TPE331-10R-512C with Garrett Service Bulletin TPE331-72-0509, dated August 21, 1985, or later approved revision incorporated.

NOTE 8 Operation of the C-212-DF Model with a TPE331-10R-512C engine on one side and TPE331-10R-513C engine on the other side is authorized for an unlimited time. Operation of the C-212-DF Model with a TPE331-10R-512C or TPE331-10R-513C engine on one side, and TPE331-10R-502C engine on the other side is authorized for a maximum of 300 hours after the later model engine is installed. C-212-DF airplane performance is unaffected with mixed engines installed.

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