

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A54EU
Revision 4
Reims Aviation SA
F406

June 12, 2006

TYPE CERTIFICATE DATA SHEET NO. A54EU

This data sheet which is a part of Type Certificate No. A54EU 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: REIMS AVIATION S.A.
BOITE POSTAL NO. 2745
51062 REIMS CEDEX, FRANCE

I. Model F406, Caravan II, (Normal Category), Approved August 28, 1986

Engine Two Pratt and Whitney Aircraft of Canada, Ltd, PT6A-112 Turboprops.

Fuel Aviation turbine fuel ASTM D-1655, Jet A, Jet A-1, or Jet B; MIL-T-5624, JP-4, JP-5; MIL-T-83133, JP-8. Anti-icing additive per MIL-I-27686D, MIL-I-27686E, or Phillips PFA55MB must be blended into the aircraft fuel in concentrations not less than 0.060% or more than 0.15% by volume. For emergency use of aviation gasoline and fueling procedures, refer to approved Airplane Flight Manual.

Engine Limits	Operating Limits				
	Shaft Horse Power	Ng Gas Generator Speed (% r.p.m.)	Indicated Torque ft - lbs	Prop Shaft Speed (r.p.m.)	Maximum Permissible Inter-turbine Temp (°C)
Takeoff Static & Max Continuous	500	101.6	1382	1900	725
Starting (2 sec.)	-	-	-	-	1090
Max. Reverse	480	101.6	1382	1815	725

Propeller and Propeller Limits Two McCauley three-bladed, full-feathering reversible
Hub: 3GFR34C701
Blade 93KB-0
Diameter: Not over 93 inches, not under 90-5/8 inches; no further reduction permitted.
Pitch at 30-inch station:
Low pitch 18.5°, feathered 85.5°, reverse 13.5°

Airspeed Limits (IAS)	V _{MO} (Maximum operating)	229 knots
	Sea Level to 21,500 ft	
	M _{MO} Above 21, 500 ft	.52 mach
	V _A (Maneuvering)	162 knots
	V _{FE} (Flaps extended)	
	30° (Landing)	180 knots
	20° (Approach)	200 knots
	10° (Takeoff)	200 knots
V _{MCA} (Air minimum control speed)	90 knots	
V _{LO} (Landing gear operating)	180 knots	
V _{LE} (Landing gear extended)	180 knots	

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C.G. Range (Landing Gear Extended)	(+166.99 in.) to (+180.28 in) at 6,500 lb. or less ((11% to 32% MAC) (+172.42 in.) to (+180.28 in.) at 9,360 lb. (19.6% to 32% MAC) Variation is linear between points Landing gear retracting moment (+ 1346 in. - lb.)		
Empty Wt. C.G.Range	None		
Leveling Means	Two screws located on W.L. 93.80 at sta. 248.25 and sta. 272.65.		
Maximum Weight	Takeoff	9,360 lb.	
	Landing	9,360 lb.	
	Zero Fuel (with zero wing klocker payload)	8,500 lb.	
	Ramp	9,435 lb.	
Number of Seats	One through fourteen (2 at +137.0, 2 at +166.0, 2 at +192.0, 2 at +218.0, 2 at 244.0, 2 at +270, and 2 at +296.0). See manufacturer's equipment list for other seating arrangements.		
Maximum Baggage	250 lb. (+32.0), 350 lb. (+71.0), 400 lb. (+211.0), 400 lb. (+301.0), and 100 lb. (+317.0).		
Fuel Capacity	3227 lb. (481.5 gal.) total in two wing tanks, 1613.5 lb. (240.75 gal.) each 3183 lb. (475 gal.) usable total. 1591.5 lb. (237.5 gal.) in each tank at sta. +181.9 Fuel weight based on 6.70 lb./gal. See NOTE 1 for data on unusable fuel.		
Oil Capacity	5.28 gal. total, 3.00 gal. usable (2.3 gal. in each engine-mounted tank at +142.1) See NOTE 1 for date on undrainable oil..		
Maximum Operating Altitude	30,000 ft.		
Control Surface Movements	Elevator (horn faired)	Up 14°, +1°, -0°	Down 17°, +1°, -0°
	Elevator trim tabs	Up 8°, +1°, -0°	Down 10°, +2°, -0°
	Rudder (perpendicular to hinge 0° faired with fin)	Right 32°, +1°, -0°	Left 32°, +1°, -0°
	Rudder trim tab (perpendicular to hinge)	Right 11°, +1°, -0°	Left 16°, +1°, -0°
	Aileron	Up 25°, +1°, -0°	Down 14°, +1°, -0°
	Aileron trim tab	Up 19°, +1°, -0°	Down 19°, +1°, -0°
	Wing flap (inboard)		Down 30°, +1°, -0°
	Wing flap (outboard)		Down 20°, +1°, -0°
Serial Numbers Eligible	A French "Certificat de Navigabilite pour Exportation" endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for US certification is made.		
Import Requirements	An FAA Standard Airworthiness Certificate may be issued on the basis of a French "Certificat de Navigabilite pour Emportation" signed by a representative of the Direction Generale de l'Aviation Civile (DGAC) of France, containing the following statement: "The airplane covered by this Certificate has been examined, tested and found to conform to the type design approved under Type Certificate No. A54EU and to be in condition for safe operation".		
Datum	100.0 inches forward of forward face of fuselage bulkhead forward of rudder pedals.		

Certification Basis:

Model 406

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-13 except Subpart B as amended through 23-14; and 23.427, 23.929, 23.979, 23.1027, 23.1163, 23.1182, 23.1189, 23.1192 as amended through 23-14; 23-951, 23.997, 23.1013, 23.1015, 23.1019(a)(1), 23.1019(a)(2), 23.1019(a)(4), 23.1019(a)(5), 23.1019(b), 23.1183 as amended through 23-15; 23.933, 23.971, 23.9977, 23.999, 23.1111, 23.1125, 23.1143, 23.1165, 23.1303 (a through d), 23.1385(c), 23.1549 as amended through 23-17; 23.901, 23.939, 23.943, 23.959, 23.967, 23.973, 23.975, 23.995, 23.1093, 23.1121, 23.1141, 23.1145, 23.1193, 23.1203, 23.1305 (a through u and w), 23.1337 as amended through 23-18; 23.1323, 23.1325, 23.1327, 23.1351, 23.1357, 23.1547 as amended through 23-20; 23.45, 23.49, 23.65, 23.67, 23.77, 23.161, 23.1043, 23.1353, 23.1521 as amended through 23-21; 23.1545 as amended through 23-23; 23.903, 23.1529 as amended through 23-26; SPAR 27 as amended by 27-1 through 27-4; Part 36 as amended by 36-1 through 36-12; SPAR 41C and Exemption No. 4661 from exact compliance with the requirements of Section 23.207(c). Findings of equivalent levels of safety were made for FAR 23.1189(a), and that design of the elevator tab control system to the requirements of FAR 23.629(f), as amended by Amendment 23-23, provides the level of safety intended by the requirements of FAR 21.21(b)(2) by preventing an unsafe condition. Therefore, FAR 23.629(f), as amended by Amendment 23-23, is applicable to the elevator tab control system, in addition to other requirements in the cited certification basis.

In addition to the above certification basis, compliance with the ice protection has been demonstrated in accordance with FAR 23.773 and 23.1419 of Amendment 23-14, FAR 23.1309 is issued through Amendment 23-17, and FAR 23.1416 of Amendment 23-23 when ice protection equipment is installed in accordance with Cessna Drawing 6015006, Factory kit (FK) No. 194, and pilot's operating handbook and FAA Approved Airplane Flight Manual. Aircraft which have been modified in compliance with Accessory Kit (AK) No. 421-106 are considered to be equivalent to those with Factory Kit (FK) No. 194.

Type Certificate No. A54EU, issued August 28, 1986.

Date of application for Type Certificate: September 5, 1983.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following item of equipment is required:

Stall Warning Indicator - Cessna Dwg. 5718030

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the time of original certification.

The certified empty weight and corresponding center of gravity location must include undrainable oil (not included in Oil Capacity) and unusable fuel as follows:

- | | |
|----------|-------------------------------|
| (a) Fuel | 44 lb. (6.5 gal.) at (+186.7) |
| (b) Oil | 0.0 lb. |

NOTE 2. The placards specified in the FAA Approved Airplane Flight Manual must be displayed.

NOTE 3. An optional cargo configuration is available which excludes the passenger air distribution and seating. Such airplanes may be operated with passenger seats installed provided the operating rules for supplemental oxygen are complied with.

- NOTE 4. Aircraft operators must observe limitations and placards shown in the applicable Pilot's Operating Manual and FAA Approved Airplane Flight Manual, or later approved revisions as listed below:
F406 - Cessna P/N D1624-13PH
- NOTE 5. The Model 406 type design has been duplicated as Model F406 in Type Certificate No. A54EU. The type design file is common between Models 406 and F406 and duplicates of the type design file are maintained by the respective type certificate holders.
- NOTE 6. During importation into the United States of REIMS Model F406 airplanes which have the factory option of a camera hole in the aft fuselage, requires compliance with REIMS Service Bulletin, SB-F406-58, as mandated by Direction Generale De L' Aviation Civile (France), Emergency Airworthiness Directive (EAD) N UF 02005-080. The effected F406 airplane serial numbers are: 0002, 0003, 0004, 0006, 0008, 0009, 0010, 0012, 0013, 0017, 0024, 0025, 0039, 0042, 0044, 0045, 0066, 0070, 0073, 0074, 0075, 0077, from 0080 through 0090 and 0092.

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