

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A26EU  
Revision 5  
Textron Aviation  
F177RG  
April 1, 2019

**WARNING:** Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes.

**TYPE CERTIFICATE DATA SHEET NO. A26EU**

This data sheet, which is a part of Type Certificate No. A26EU, 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	Textron Aviation Inc. One Cessna Boulevard Wichita, KS 67215
Type Certificate Holder Record	Cessna Aircraft Company transferred to Textron Aviation Inc. on July 29, 2015

Type Certificate A26EU was transferred from Reims Aviation S.A., 51 Aerodrome de Reims-Prunay, Reims, France, to Cessna Aircraft Company on December 11, 2006. Coincident with this transfer, the Federal Aviation Administration (FAA) has accepted responsibilities of State of Design for all airplanes, and State of Manufacture for airplanes manufactured after December 11, 2006 as defined by Annex 8 to the Convention on International Civil Aviation. Prior to December 11, 2006, products identified under Type Certificate A26EU were approved by the FAA in accordance with the Federal Aviation Regulation appropriate to Imported Products (FAR 21.29). Effective December 11, 2006, and after, these products are to be considered domestic products for the purpose of design certification, continued airworthiness, and administered under Federal Aviation Regulations §21.21.

**I. Model F177RG, 4 PCLM (Normal Category), Approved April 26, 1971**

Engine	Lycoming IO-360-A1B6 or IO-360-A1B6D
* Fuel	100/130 minimum grade aviation gasoline
* Engine Limits	For all operations, 2700 rpm (200 hp)
Propeller and Propeller Limits	<ol style="list-style-type: none"><li>1. McCauley B2D34C206/78TA<ol style="list-style-type: none"><li>a. Diameter: not over 78 in., not under 76.5 in. Pitch setting at 30 in. sta. : low 12.9°, high 27.5°</li><li>b. Cessna spinner 0752637</li><li>c. McCauley hydraulic governor C290D2/T11 (IO-360-A1B6), or C290D2/T12 (IO-360-A1B6D)</li><li>d. Woodward hydraulic governor C210460 (IO-360-A1B6 only).</li></ol></li><li>2. McCauley B2D34C207/78TCA<ol style="list-style-type: none"><li>a. Diameter: not over 78 in., not under 76.5 in. Pitch setting at 30 in. sta. : low 12.9°, high 27.5°</li><li>b. Cessna spinner 0752637</li><li>c. McCauley hydraulic governor C290D2/T11 (IO-360-A1B6), or C290D2/T12 (IO-360-A1B6D)</li><li>d. Woodward hydraulic governor C210460 (IO-360-A1B6 only).</li></ol></li></ol>

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**I. Model F177RG** (cont'd)

*    Airspeed Limits (CAS)	Never exceed	195 mph	(169 knots)
	Maximum structural cruising	160 mph	(139 knots)
	Maneuvering	130 mph	(113 knots)
	Flaps extended	110 mph	( 96 knots)
	Landing gear operating speed	140 mph	(122 knots)
	Landing gear extended speed	140 mph	(122 knots)
C.G. Range (Landing gear extended)	(+101.0) to (+114.7) at 2200 lb. or less (+105.8) to (+114.7) at 2800 lb. Straight line variation between points given. Moment change due to retracting landing gear (+2776 in. -lb.)		
Empty Wt. C.G. Range	None		
*    Maximum Weight	Normal category 2800 lb.		
Number of Seats	4 (2 at sta. +93.0), 2 at sta. +145.0)		
Maximum Baggage	120 lb. (+154.5 fwd. of wheel well, +178.5 aft of wheel well)		
Fuel Capacity	<u>S/N F177RG0001 through F177RG0062</u> 51 gal. (two 25.5 gal. fuel bays in wing at sta. +112; 50 gal. usable).  <u>S/N P177RG0063 and on:</u> 61 gal. (two 30.5 gal. fuel bays in wing at sta. +112; 60 gal. usable).  See NOTE 1 for data on unusable fuel.		
Oil Capacity	<u>Without oil filter:</u> 8 qt. (+44), (2 qt. unusable)  <u>With oil filter:</u> 9 qt. (+45). (3 qt. unusable; 2 qt. in sump plus 1 qt. in oil filter).  See NOTE 1 for data on undrainable oil.		
Control surface movements	Wing Flaps		Down    30° + 2° -0°
	Aileron	Up    20° ± 2°	Down    15° ± 2°
	Stabilator	Up    20° ± 1°	Down    5° ± 1°
	Stabilator tab	Up    5° ± 1°	Down    13° ± 1°
	Rudder (measured perpendicularly to hinge line)	Right    24° ± 1°	Left    24° ± 1°
Serial No's Eligible	F177RG0001 through F177RG0177		

**DATA PERTINENT TO ALL MODELS**

Datum	54.0 forward of front face of lower portion of firewall
Leveling Means	Jig located nutplates and screws at sta. +213.0 and sta. +238.0 on left of tailcone.
Certification Basis	Part 23 of the Federal Aviation Regulations dated February 1, 1965 as amended by 23-1 thru 23-6. Application for Type Certificate dated 26 April 1971. Type Certificate No. A26EU issued 17 May 1971, obtained by the manufacturer under delegation option procedures.

### DATA PERTINENT TO ALL MODELS

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 2070002

NOTE 1. Current weight and balance report including 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 certificated empty weight and the corresponding center of gravity locations must include undrainable oil of 0.0 lb. at 44.0 and unusable fuel of 6 lb. at 100.0

NOTE 2. The following placards must be displayed as indicated:

A) In full view of the pilot:

“This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

## MAXIMUMS

Maneuvering speed	130 mph-CAS (113 knots)
Gear extension speed	140 mph-CAS (122 knots)

Gross weight		2800 lb.	
Flight load factor	Flaps up	+3.8	-1.52
	Flaps down	+2.0	

No acrobatic maneuvers, including spins, approved.  
Altitude loss in a stall recovery 190 ft.  
Flight into known icing conditions prohibited.  
This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY NIGHT VFR IFR) (As applicable)''

B) On control lock: "Control lock - remove before starting engine"

C) By fuel valve (at appropriate locations):

1) S/N F177RG0001 through F177RG0062:

"ON - 50 GAL.

OFF"

2) S/N F177RG0063 and on:

"BOTH - 60 GAL.

LEFT - 30 GAL"

RIGHT - 30 GAL.

Use both for take-off and landing.

When switching from a dry tank, turn auxiliary pump on and use full rich mixture until power is restored."

D) Aft of fuel tank cap:

1) S/N F177RG0001 through F177RG0062:

"Service this airplane with 100/130 grade aviation gasoline.

Total capacity 25.5 gal.

Capacity to line of holes inside filler neck, 22.0 gal."

**DATA PERTINENT TO ALL MODELS**

NOTE 2. (cont'd)

- 2) S/N F177RG0063 and on  
 "Service this airplane with 100/130 grade aviation gasoline.  
 Total capacity 30.5 gal.  
 Capacity to line of holes inside filler neck, 22.0 gal."
- E) In baggage compartment:
  - 1) "120 lb. maximum baggage."
  - 2) "For additional loading instructions see weight and balance data."
- F) Next to door ventilation windows:  
 "Do not open window above 120 mph or when using alternate static source."
- G) On airspeed indicator:
 

1) "Radial red line	195 mph (CAS)
2) Yellow arc	160 - 195 mph (CAS)
3) Green arc	70 - 160 mph (CAS)
4) White arc	60 - 110 mph (CAS)
- H) On oil temperature gage:
  - 1) "Red line at 245°F."
  - 2) "Green arc 100° to 245°F."
- J) On oil pressure gage:
  - 1) "Red line at 25 psi"
  - 2) "Green arc 60 psi to 90 psi"
  - 3) "Red line at 100 psi"
- K) Tachometer:
 

"Normal operating	2100 - 2500 rpm (green arc)
Caution	1400 - 1750 rpm (yellow arc)
Maximum allowable	2700 rpm (red line)"
- L) On fuel flow gage:
  - 1) "Red line 10 psi"
  - 2) "Green arc 6 to 13 gph"
- M) Near fuel flow gage:
 

1) "Max. power	Alt.	S.L.	4000	8000	12000
2) "Mixture	GPH	17	15	13	10"
- N) On flap control indicator:
  - 1) "0 to 10° - T.O. (Takeoff range with blue color code and 150 mph callout; also mechanical detent at 10°.
  - 2) 10° - 20° - 30° (Indices at these positions with white color code and 110 mph callout; also, mechanical detent at 20°)."
- P) Proximity of tachometer:  
 "Avoid continuous operation between 1400-1750 rpm with less than 10" manifold pressure."
- Q) On cylinder head temperature gage:
  - 1) "Red line at 475°F."
  - 2) "Green arc 200° to 475°F."
- R) On instrument panel (S/N F177RG0001 through F177RG0042 only):  
 "Do not turn off alternator in flight except in emergency."

**DATA PERTINENT TO ALL MODELS**

NOTE 2. (cont'd)

S) On Emergency Landing Gear Pump Handle Cover:

“EMERGENCY HAND PUMP PULL UP”

TO EXTEND GEAR MANUALLY:

- 1) Place gear lever in down position.
- 2) Extend pump handle.
- 3) Pump approximately 40 pressure strokes.
- 4) Stop when resistance becomes heavy.
- 5) Verify gear is down by observing green light.

**IMPORTANT**

To permit gear retraction after hand pump use full relief valve knob for a minimum period of five seconds. Then move gear lever to the UP position."

T) On manifold pressure gage:  
"15 to 25 in.hg. (green arc)."

NOTE 3. The cylinder head probe location for the Model F177RG is No. 3 cylinder.

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (\*) under Section I of this Data Sheet must also be displayed by permanent markings.

NOTE 4. Aircraft manufactured in France prior to December 11, 2006 and subsequently placed on the U.S. Registry, may be granted a U.S. Airworthiness Certificate on the basis of 14 CFR Part 21, Section 21.183(d). This will be a recurrent airworthiness certification and requires a statement or attestation of conformity to the applicable type design at the time of original manufacture be obtained from the DGAC France (e.g., the French TC / U.S. 21.29). This "baseline" conformity determination can then be used as a starting point for which to evaluate the aircraft's present conformity of type design and condition for safe operation as required by 21.183(d) (e.g., Review of all modifications and repairs, AD compliance, appropriate maintenance, etc., depending upon the current exporting authority and any applicable bilateral agreement).

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