

LIMITATIONS

CERTIFICATION BASIS

The REIMS/CESSNA F150L is certified in the Utility Category under AIR 2052 regulations, with amendments dated 5 November 1965, with the limits indicated in this section.

AIRSPEED LIMITATIONS

	km/h	kts	mph
Vne (Never Exceed Speed).....	261	141	162
Vno (Maximum Structural Cruising Speed).....	193	104	120
Vp (Maneuvering Speed)	175	95	109
Vfe (Maximum Speed, Flaps Extended).....	161	87	100

AIRSPEED INDICATOR MARKINGS

Red Line	261	141	162
Yellow Arc (Caution Range)	193-261	104-141	120-162
Green Arc (Normal Operating Range)....	90-193	49-104	56-120
White Arc (Flap Operating Range)	79-161	43-87	49-100

FLIGHT MANEUVERING LOAD FACTORS AT GROSS WEIGHT (726 KG)

Flaps Up	+ 4.4	- 1.76
Flaps Down	+ 3.5	

MAXIMUM GROSS WEIGHT FOR TAKE-OFF AND LANDING

Take-off	: 726 kg
Landing	: 726 kg

CENTER OF GRAVITY LOCATION

Leveling Means : Screws on outer left side aft of cabin.

Center of Gravity Reference : Forward face of firewall.

Center of Gravity Range Limits at 726 kg Gross Weight :

Forward Limit : + 0,835 m Aft Limit : + 0,952 m

LOADING LIMITS

Number of Occupants : Front Seats : 2

Minimum Crew : 1

Maximum Baggage in Baggage Compartment : 120 lbs (54 kg)

Occupied Optional Child's Seat Approved if Fitted With a Safety Belt

AUTHORIZED OPERATIONS

If equipped with good condition instruments described in the approved appendix of this manual, this aircraft is certified for day, night, VFR and IFR flight operations.

FLIGHT IN ICING CONDITIONS

Flight in icing conditions is strictly prohibited.

MANEUVERS - UTILITY CATEGORY

This airplane is not designed for aerobatic maneuvers. However, certain maneuvers that are required in the acquisition of various certificates may be performed provided the limitations in the following table are not exceeded.

No aerobatic maneuvers are approved except those listed below :

<u>MANEUVER</u>	<u>RECOMMENDED ENTRY SPEED</u>
Chandelles	175 km/h - 95 kts - 109 MPH
Lazy Eights	175 km/h - 95 kts - 109 MPH
Steep Turns	175 km/h - 95 kts - 109 MPH
Spins	Use Slow Deceleration
Stalls (Except Whip Stalls)	Use Slow Deceleration

During prolonged spins the engine may stop ; however, spin recovery is not adversely affected by engine stoppage.

Intentional spins with flaps extended are not approved. Inverted flight maneuvers are not recommended.

The important thing to bear in mind in flight maneuvers is that the airplane is clean in aerodynamic design and will build up speed quickly with the nose down. Proper speed control is an essential requirement for execution of any maneuver, and care should be exercised to avoid excessive speed which in turn can impose excessive loads. In the execution of all maneuvers, avoid abrupt use of controls.

ENGINE OPERATION LIMITATIONS

Power and Speed 74.6 KW (100 HP) at 2750 RPM

ENGINE INSTRUMENT MARKINGS

OIL TEMPERATURE GAGE

Normal Operating Range Green Arc
Maximum Allowable 240°F (116°C) red line

OIL PRESSURE GAGE

Minimum Idling 10 psi (0.69 bar) (red line)
Normal Operating 30-60 psi (2.07-4.13 bars) (green arc)
Maximum 100 psi (6.89 bars) (red line)

FUEL QUANTITY INDICATORS

Empty E (red line)
(6.5 litres unusable each tank)

TACHOMETER

Normal Operating Range

At sea level	2000-2550 RPM (inner green arc)
At 5000 feet	2000-2650 RPM (middle green arc)
At 10,000 feet	2000-2750 RPM (outer green arc)
Maximum Allowable	2750 RPM (red line)

PLACARDS

The following information is displayed in the form of individual placards.

(1) In full view of the pilot :

This airplane is approved in the utility category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals

MAXIMUMS

MANEUVERING SPEED	109 MPH - 95 kts - 176 km/h
GROSS WEIGHT	1600 lbs - 726 kg
FLIGHT LOAD FACTOR Flaps Up	+4.4 - 1.76
Flaps Down	+3.5
DEMONSTRATED CROSSWIND	20 kts - 37 km/h

NO AEROBATIC MANEUVERS APPROVED
EXCEPT THOSE LISTED BELOW

<u>Maneuver</u>	<u>Max. Entry Speed</u>
Chandelles	109 MPH - 95 kts
Lazy Eights	109 MPH - 95 kts
Steep Turns	109 MPH - 95 kts
Spins	Slow Deceleration
Stalls (except Whip Stalls)	Slow Deceleration

Spin Recovery : opposite rudder - forward elevator.
Intentional spins with flaps extended are prohibited. Known icing conditions to be avoided. This airplane is certified, depending on the equipment items installed, for the following flight operations as of date of original airworthiness certificate :

DAY - NIGHT - VFR - IFR

(2) In the baggage compartment :

120 lbs - 54 kg maximum baggage and/or auxiliary seat passenger. For additional loading instructions see Weight and Balance Data.

- (3) Near fuel shut-off valve :

Fuel 22.5 gals - 85 litres ON-OFF.

- (4) On the instrument panel near overvoltage light :

HIGH VOLTAGE