

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

Translation of 'Consigne de Navigabilité' ref. : 1998-377(A)
In case of any difficulty, reference should be made to the French original issue.

REIMS CESSNA

F406 airplanes

Flight in icing conditions (ATA 30)

1. APPLICABILITY :

F406 airplanes all serial number.

2. COMPLIANCE :

To minimize the potential hazards associated with operating the airplane in severe icing conditions by providing more clearly defined procedures and limitations associated with such conditions the following measures are made mandatory at the effective date of this Airworthiness Directive.

3. ACTIONS :

Within 30 days after the effective date of this Airworthiness Directive, accomplish the requirements of paragraphs (1) and (2) of this AD .

- 1) Revise the FAA approved Airplane Flight Manual (AFM) by incorporating the following into the Limitations sections of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

"WARNING"

Severe icing may result from environmental conditions outside of those for which the airplane is certified. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquide water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the airplane.

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During flight severe icing conditions that exceed those for which the airplane is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing condition.

- Unusually extensive ice accumulation on the airframe and windshield in areas not normally observed to collect ice.
- Accumulation of ice on the upper surface of the wing, aft of the protected area.
- Accumulation of ice on the engine nacelles and propeller spinners farther aft than normally observed.
- Since the autopilot, when installed and operating, may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the airplane is in severe icing conditions.
- All wing icing inspection lights must be operative prior to flight into icing conditions at night.

Note : This supersedes any relief provided by the Master Minimum Equipments List (MMEL).

- 2) Revise the FAA approved AFM by incorporating the following into the Normal procedures section of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

**THE FOLLOWING WEATHER CONDITIONS
MAY BE CONDUCTIVE TH SEVERE IN-FLIGHT ICING**

- Visible rain at temperatures below 0 degrees Celsius ambient air temperature.
- Droplets that splash or splatter on impact at temperatures below 0 degrees Celsius ambient air temperature.

**PROCEDURES FOR EXISTING
THE SEVERE ICING ENVIRONMENT**

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperature around freezing with visible moisture present. If the visual cues specified in the limitations section of the AFM for identifying severe icing conditions are observed, accomplish the following :

- Immediately request priority handling from Air Traffic control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the airplane has been certificated.
- Avoid abrupt and excessive manoeuvring that may exacerbate control difficulties.
- Do not engage the autopilot
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.

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- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of attack.
- Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report the weather condition to Air Traffic Control.

Record the application of this Airworthiness Directive on the aircraft logbook.

REF. : AD 98-04-28

EFFECTIVE DATE : AUGUST 07, 1999