

Continuing Airworthiness Notice – 25-003



Cessna 206, T206, TU206 and U206 aircraft series – Emergency Egress Difficulty

20 April 2020

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

Textron Aviation Inc. (formerly Cessna Aircraft Company) model 206, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 206H and T206H aircraft, all S/N.

Purpose:

This Continuing Airworthiness Notice (CAN) is issued to advise operators and maintainers that Transport Canada (TC) has issued AD CF-2020-10 with effective date 23 April 2020 which identifies certain emergency egress difficulties on Cessna 206, T206, TU206 and U206 aircraft series. There is objective evidence that difficulty opening the cargo doors has contributed to fatalities during accidents in Canada involving the model 206 aircraft.

Background:

This CAN is prompted by the issue of TC AD CF-2020-10 and their validation of the type design of the Textron Aviation Inc. models 206H and T206H aircraft. TC determined that the cargo doors located at the aft right-hand side of the cabin were not satisfactory to be considered an emergency exit. After performing testing and evaluation, TC concluded that the design of the doors did not satisfy the certification requirements that the method of opening the doors be simple and obvious and the doors be readily operated, even in darkness. During that validation, TC determined that emergency egress for aft seat occupants through the front left door of the aircraft is satisfactory only if one or none of the two centre row seats is installed. Removing a centre row seat provides an escape path to the front exit for the occupants of the rear seats. For that reason, TC imposed occupancy and other limitations on the 206H and T206H models. These limitations are defined in Type Certificate Data Sheet A-212.

Earlier versions of the model 206 registered in Canada that feature the cargo doors have not been subject to occupancy limits, other limitations or corrective action requirements related to the cargo doors. These earlier versions of the model 206 have continued to operate in Canada without corrective or mitigating action despite the fact that the method of opening the cargo doors is essentially the same as the method for the 206H and T206H models. There is objective evidence that difficulty opening the cargo doors has contributed to fatalities during accidents in Canada involving the model 206.

TC considers that an unsafe condition exists if there is factual evidence that emergency equipment, life support systems or survivability equipment may not perform as intended. This AD introduces mitigating actions to improve the likelihood that all occupants of the model 206 that are equipped with cargo doors, will be able to successfully egress the aircraft in an emergency situation.

Recommendation:

The CAA strongly recommends that operators of affected Cessna 206, T206, TU206 and U206 aircraft series review TC AD CF-2020-10.

The corrective actions in this AD impose new limitations on how the affected aircraft can be configured and loaded. TC emphasizes that, when performing mission planning and loading of the aircraft, it is important not only that the existing limitations and those introduced by the AD are complied with, but that best practices (such as avoiding aft centre of gravity (CG) near the aircraft limits when operating on floats) are also respected.

The Federal Aviation Administration (FAA) has approved a change to the design of model 206 that offers some risk mitigation from this hazard. FAA Supplemental Type Certificate (STC) SA1470GL installs a door at the front on the right-hand side of the model 206 cabin. TC considers that this door offers a viable means of emergency egress for occupants of the front and centre-row seats in the event that the front left door is not functional or if access to the front left door is obstructed. Aircraft that have been modified in accordance with STC SA1470GL are exempted from the requirements of this AD subject to certain conditions as detailed in the Exemptions section of this AD.

Some 206 models in Canada are used for parachuting/skydiving operations. In this role, the cargo doors are removed. These aircraft are exempted from the requirements of this AD subject to certain conditions as detailed in the Exemptions section of this AD.

The TC AD is not mandatory in NZ. The FAA (i.e. the State of Design for Cessna aircraft) is not planning any corrective action at this time. However, the FAA has issued an Airworthiness Concern Sheet a couple of months ago and their intention is to review all comments and discuss with FAA senior management whether there is any FAA corrective action that is warranted.

Transport Canada AD CF-2020-10 can be obtained from the TC AD website at <http://www.wapps3.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/awd-lv-cs1401.asp?rand>