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RDIMS/SGDDI : 16160097
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February 17, 2020

Canadian Owners/Operators of Textron Aviation Inc. (Cessna) U206-series, TU206-series, T206H and 206H Model Aeroplanes
Aerospace Industries Association of Canada
Air Transport Association of Canada
Association québécoise du transport aérien
Canadian Owners and Pilots Association
Northern Air Transport Association
Transportation Safety Board of Canada
National Transportation Safety Board
United States Department of Transportation - Federal Aviation Administration
European Union Aviation Safety Agency
Textron Aviation Inc.

Subject: Targeted Consultation of Proposed (Draft) Transport Canada
Airworthiness Directive Mitigating Safety Risks Associated with
Emergency Egress from Textron Aviation Inc. (Cessna) Model 206
Aeroplanes

Dear Sir, Madam,

On February 18, 2019 the Transportation Safety Board of Canada (TSB) issued Aviation Safety Advisory [A18W0129-D1-A1](#) to Transport Canada Civil Aviation (TCCA) to bring attention to a significant safety issue involving Cessna 206 series aircraft that are fitted with double cargo doors. TCCA has investigated the issue and made the determination that an unsafe condition exists and has therefore established that corrective action in the form of an Airworthiness Directive (AD) is required to mitigate the safety risk. Additional details about the situation and our proposed AD are attached in the Airworthiness Directive Backgrounder appended to this letter.

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Existing regulations enable Transport Canada to conduct stakeholder consultation as required. For that reason we are contacting you to inform you of our proposed AD and give you the opportunity to review and comment on it before we issue it. A draft copy of the AD is enclosed with this letter. Please review the AD and, if you have comments, suggestions or concerns, please share those with us by sending an email to this address: TC.U206Comments-CommentairesU206.TC@tc.gc.ca with “Cessna 206 AD” in the subject line. This consultation will close 2020-03-18 [30 days from date that consultation is initiated].

Transport Canada will take all feedback into consideration in the process of developing the Airworthiness Directive. In conclusion, we would like to thank you in advance for your feedback about this draft AD.

Yours truly,

Transport Canada | Transports Canada
Government of Canada | Gouvernement du Canada
TC.U206Comments-CommentairesU206.TC@tc.gc.ca

Encl. Draft Airworthiness Directive Cessna U206-Series TU206-Series Egress Difficulty (RDIMS 15051551 version 22)

Appendix - Airworthiness Directive Backgrounder

A 2018 accident involving a model U206G aeroplane on floats led to three fatalities. The [TSB report](#) from the investigation of the accident stated that the three passengers who did not survive had removed their seat belts but were unable to exit the aircraft and drowned.

The affected aeroplanes are typically configured with six seats arranged in three rows of two seats each. The cargo doors on 206, U206-series, TU206-series, T206H and 206H model aeroplanes are designated as an emergency exit for the rear seat occupants. With both centre-row seats installed, the cargo doors are the only practical emergency exit for the occupants of the rear seats. When the flaps are deployed they prevent one of the two doors from opening very far and increase the complexity of the door operations. Previous accident investigations involving affected aeroplanes have identified difficulty opening the cargo doors as having contributed to fatalities.

For Canadian accidents involving the affected aeroplanes which are considered to be otherwise survivable, most of the fatalities have been attributed to drowning in accidents that terminated in the water. However, post-crash fire after accidents terminating on land is also a significant risk affecting general aviation aeroplanes. As documented in the applicable design safety standards and advisory material, it is required that a readily-accessible emergency exit whose method of opening is simple and obvious be available to all occupants regardless whether the aircraft is configured for operation on land or water.

When Transport Canada validated the type design of the Cessna models 206H and T206H it was determined that the cargo doors were not satisfactory for emergency egress which meant that rear seat occupants were expected to egress through the front left door. During that validation, Transport Canada determined that emergency egress for rear seat occupants through the front left door of the aeroplane is satisfactory only if one of the two centre row seats is removed. Removing a centre row seat provides an escape path to the front exit for the occupants of the rear seats, thus avoiding the need to use the cargo doors for egress in an emergency. For that reason model 206H and T206H aeroplanes operating in Canada are already subject to the occupancy and seat-positioning limitations that Transport Canada plans to impose on the other U206 and TU206 models by this AD. The proposed AD contains three corrective action requirements. The purpose of each corrective action is as follows:

- Occupancy restrictions – these are intended to provide a relatively clear path to the front left door for occupants of the rear row of seats.
- Modification of the cargo doors – this is intended to ensure every cargo door is as well-placarded and as functional as possible. The modification required by this corrective action installs a return spring in the aft cargo door latch handle assembly and luminescent placards for door handle location and operation. In some cases the front left hand door will be rendered inoperable by damage to the fuselage or obstructions outside the aeroplane during an accident sequence. In those situations the cargo doors will be the only exit available to occupants. It is

important that the doors be made as functional as possible to maximize the opportunities for occupants to survive an accident.

- Ensuring aft row seat occupants are capable of opening the doors with the flaps down – the sequence of actions required to open the doors is complex with the flaps down. For this reason a naïve occupant, one who has no experience operating the door, cannot reasonably be expected to accomplish the task in the stressful context of an accident. Occupants that have been familiarized with the doors' function and have demonstrated the ability to open the doors without assistance are more likely to be successful opening the doors in an emergency. As previously noted, in some situations the cargo doors will be the only functional exit from the aeroplane.
- Ensuring aft row seat occupants are instructed to use the forward exit – Because the cargo doors are the nearest exit for these occupant, and they are required by the AD to demonstrate that they can open the doors, they may attempt to use the cargo doors for egress in an emergency. For this reason the AD includes a requirement for the pre-flight safety briefing to include clear instructions to any aft seat row occupants to exit through the front door unless that door is unusable to inaccessible for some reason.