Continued Airworthiness Notification to the International Community

To: Civil Aviation Authorities **Date:** February 13, 2020

From: Federal Aviation Administration
Policy and Innovation Division
901 Locust, Room 301
Kansas City, MO 64106

Subject: This message is to advise you of the FAA's ongoing activities related to corrosion on the carry-thru spar lower cap on Textron Aviation, Inc. (type certificate formerly held by Cessna Aircraft Company) (Textron) Models 210- and 177-series airplanes.

Accident/ Incident Description: On May 26, 2019, a Textron Model T210M airplane experienced an in-flight separation of the right wing while performing low-altitude aerial survey operations near Mount Isa, Queensland, Australia, resulting in a fatal accident. Visual examination of the fracture surface identified fatigue cracking that initiated at a corrosion pit. On July 27, 2019, the FAA issued an airworthiness concern sheet (ACS) advising owners and operators of the accident and requesting relevant information about the Textron Models 210 and 177-series airplane fleet. Model 177-series airplanes share a similar carry-thru spar design with Model 210-series airplanes. Subsequent reports from owners and operators identified the presence of widespread and severe corrosion, including several instances of exfoliation corrosion and stress corrosion cracking, particularly on the early Model 210-series (Models 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, and T210M) airplanes. Further investigation discovered that the early Model 210-series airplanes were manufactured without corrosion protection or primer, increasing their susceptibility to corrosion. The design of these early model airplanes, where the upper surface of the spar is exposed to the environment, allows a pathway for moisture intrusion. Model 210-series airplanes were also delivered with foam installed along the carry-thru spar lower cap. The foam traps moisture against the lower surface of the carry-thru spar cap, which can increase the development of corrosion. As of January 29, 2020, the FAA has received 194 reports on these early Model 210-series airplanes; 96 airplanes have reported corrosion (49%), with 18 of those reports resulting in the carry-thru spar being removed from service due to severe corrosion. This condition, if not addressed, could lead to fatigue cracks or inability of the carry-thru spar to support the required structural loads, which could result in separation of the wing and loss of airplane control.

Aircraft/ Engine Make, Model and Series: Textron Aviation Inc. Models 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, T210M, 210N, P210N, T210N, 210R, P210R, T210R, 177, 177A, 177B, and 177RG airplanes.

Worldwide fleet: 7,500 **U.S.-registered fleet:** 4,941

The FAA estimates the following fleet numbers:

	Worldwide Fleet	U.S. Registered Fleet
Models 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, and T210M	2,285	1,520
Models 210N, P210N, T210N, 210R, P210R, and T210R	1,715	1,130
Models 177, 177A, 177B, and 177RG	3,500	2,291

Operators: The affected operators are primarily general aviation operators.

Ongoing activities: The FAA is in the process of issuing an airworthiness directive (AD) as an immediately adopted rule to address the unsafe condition on Models 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, and T210M airplanes. The AD will require inspections of the carry-thru spar lower cap, application of a protective coating and corrosion inhibiting compound, and reporting the inspection results to the FAA. The FAA continues to evaluate Models 210N, P210N, T210N, 210R, P210R, T210R, 177, 177A, 177B, and 177RG airplanes to determine appropriate corrective action.

Contact:
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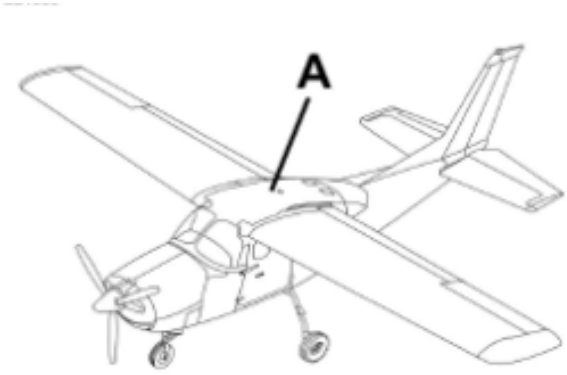
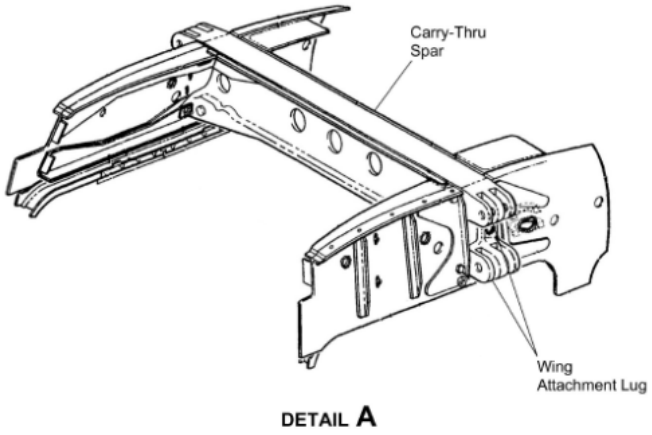
Cessna 210 Wing Carry Through Corrosion





Australian Accident Carry Through Spar

Fielded Airplane - Recent Example