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May 29, 2019

U.S. Department of Transportation Docket Operations, M-30 West Building Ground Floor Room W12-140 1200 New Jersey Avenue, SE Washington, DC 20590

Subject: Docket No. FAA-2019-0350; Product Identifier 2019-CE-025-AD Airworthiness Directive; Textron Aviation Inc. Airplanes

Dear Sir or Madam,

Tamarack Aerospace is an aerospace engineering and aircraft modification company that designs and develops innovative technology for business, commercial, and military aircraft. On May 24, 2019 the Federal Aviation Administration (FAA) issued Airworthiness Directive 2019-08-13 (AD), FAA Docket No. FAA 2019 0350, without the opportunity for prior comment.

Tamarack Aerospace and Cranfield Aerospace Solutions are partners such that Cranfield Aerospace Solutions is the design approval holder (DAH) and Tamarack Aerospace is the manufacturer and installer of the ATLAS winglets for Textron Aviation, Inc. model 525, 525A, and 525B airplanes. Tamarack is committed to the safety of its products and working with Cranfield Aerospace Solutions, EASA, and the FAA. Accordingly, Tamarack offers the following corrective and supplemental information regarding statements in the AD and respectfully requests that the FAA considers updating the AD to reflect the latest information.

Existing Service Bulletins

Both Tamarack Aerospace and Cranfield Aerospace Solutions have been cooperating and coordinating with EASA, the state of design, to ensure the continued safety of the 91 aircraft equipped with the ATLAS modification worldwide (76 aircraft in the U.S.). This effort has included proactive product enhancements provided to the fleet at no charge well before an ADs were issued. These improvements have improved the reliability of the equipment (SB1467) and also help neutralize the impact of system failures via a Tamarack Active Camber Surface (TACS) centering upgrade (SB1475).

These service bulletins are EASA DOA approved, and were available to the ATLAS winglet customers via the Tamarack Support website as early as March 2018.

Of the 76 aircraft in the U.S., 51 have incorporated the equipment upgrades (SB1467); and 69 have incorporated the TACS centering upgrade (SB1475). These numbers continue to increase as the upgrades are adopted in the fleet.

No incidents have been reported for those aircraft with upgraded equipment.

Cranfield Aerospace Solutions, as the Design Approval Holder, has proposed these Service Bulletins as an acceptable means of compliance and terminating action to the EASA AD No.: 2019-0086-E, issued on April 19, 2019 ("the MCAI"). Tamarack respectfully asks that the FAA consider this information in its risk assessment. Tamarack also requests to coordinate with the FAA on this acceptable means of compliance to facilitate efficient approval for the FAA AD.

Additional Data Regarding the Event Triggering EASA's Action
This AD comes five weeks after EASA issued the MCAI following an incident in April of 2019. Since this action, new information has become available that is relevant to the FAA's risk assessment.

EASA issued the MCAI following an incident on 13 April 2019, which initially appeared to call into question some EASA certification and flight tests about aircraft controllability in the event of an ATLAS failure.

In the weeks since the EASA action was issued, additional information has become available about the equipment failure and the severity of the incident. Specifically, the pilot report from the incident characterized the event as a 90 degree roll in 1 second. Data extracted from the aircraft, however, shows that the events aligned with what EASA observed in certification flight tests. EASA flight test concluded that the aircraft could be recovered by application of the Aircraft Flight Manual Supplement Emergency procedure, and that recovery from an ATLAS failure like this does not require exceptional pilot skill or strength.

We respectfully request that the FAA consider this information in evaluating the risk present in the fleet.

Statement About Ongoing NTSB Investigation

In support of the AD, the FAA references an ongoing accident investigation, stating that "The NTSB investigation focuses on the role the ATLAS may have played in the accident." This statement comes as a surprise and a significant concern for Tamarack Aerospace and Cranfield Aerospace Solutions. Tamarack Aerospace and Cranfield Aerospace Solutions have offered technical support to the NTSB after the November accident, but have not been asked to participate in the investigation. Tamarack has not been made aware of any information linking the ATLAS STC to the event, nor that the



NTSB is focused on the ATLAS STC. If the FAA is aware of such information, then the agency, in coordination with the NTSB, should immediately inform the manufacturer and the DAH in order to facilitate appropriate support for the continued operational safety of the product.

If the FAA does not have information that the NTSB is focused on the role of the ATLAS STC, then the statement should be removed from the AD as inaccurate.

Hazard Classification

The AD states that "loss of control of the airplane may occur with the ATLAS disabled." This statement conflicts with the certification basis and system safety analysis of the design and compliance data collected by EASA in the course of certification testing.

EASA certification flight test results were used to classify hazards associated with ATLAS failures over an extensive survey of simulated failure conditions. The assessments were conducted according to accepted guidance for evaluating flight control system failures. EASA concluded that recovery from an ATLAS failures does not require exceptional pilot skill or strength.

We respectfully request that this statement be removed because it inaccurately characterizes the risk present in the fleet if flights are conducted in the event of an ATLAS system failure or with ATLAS disabled.

Service Information

The AD states that "The FAA finds the service information from the STC holder (Cranfield Aerospace Solutions) does not contain adequate instructions to safely disable the ATLAS." Customers have reported confusion about the referenced "service information."

Accordingly, we respectfully request the following clarificatory change: "The FAA finds the service information from the STC holder (Cranfield Aerospace Solutions Ltd. Service Bulletin (SB) CAS/M0132) does not contain adequate instructions to safely disable the ATLAS."

Tamarack remains committed to the safety of its products. We will work closely with Cranfield Aerospace Solutions, EASA, and the FAA to offer solutions and improvements.

Sincerely,

Jacob Klinginsmith

Chief Engineer

