

Safety Recommendation Number:	IRLD2022009
AAIU Event Reference:	IRL00919027
AAIU Report Number:	2022-006
Date of Publication of Safety Recommendation:	27 May 2022
Safety Recommendation Status:	Not accepted, closed

Safety Recommendation:

The Ministry of Transport of the Czech Republic should review the Type Certification procedures of the Czech Light Aircraft Association and ensure that a robust process is in place with respect to the examination and acceptance of documentation provided by an aircraft manufacturer in support of their design.

Response:

In a letter dated 18 August 2022 the Ministry of Transport of the Czech Republic provided the following response to Safety Recommendations IRLD2022009:

‘The Ministry of Transport of the Czech Republic reviewed the type certification procedures of the Light Aircraft Association of the Czech Republic (hereinafter referred to as "LAA CR") as a person authorized to perform state administration in sport flying devices matters. The procedures for Supervising the certification of individual amateur-built aircraft (hereinafter referred to as "ABA") and issuing of type certificates for individual types are sufficient. The review of the type-certification process for the ABA type in question did not identify any deficiencies in the LAA CR processes.

By issuing the Type certificate the LAA CR confirms the fulfilment of the requirements given by the national rules and procedures established for ABA certification within the territory of the Czech Republic. Part of the approval process, or rather the issuance of the Type certificate in the Czech Republic, includes the assessment of the draft of the aircraft's Operational documentation. However, it does not contain, and cannot contain, any data to determine the weight and position of the centre of gravity of the aircraft to be built from the kit or part of kit and customized by user needs. The data to determine the weight and position of the centre of gravity must be set for each finalized ABA. Only then can the aircraft be approved for operation by the relevant authority according to local regulations, i.e., not according to the national regulations of the Czech Republic.

The documentation issued to ABA built from a kit and approved for operation outside the territory of the Czech Republic, i.e., by the national authorities of individual states, does not and cannot fall under the purview of the national authorities of the Czech Republic, therefore, the competent administrative authorities of the Czech Republic will not even comment on it’.

AAIU Reply:

In a letter dated 7 September 2022 the AAIU reverted to the Ministry of Transport of the Czech Republic with the following:

The AAIU acknowledges the response to Safety Recommendation IRLD2022009 by the Ministry of Transport of the Czech Republic.

Although the response of the Ministry of Transport of the Czech Republic is confined to Amateur Built Aircraft, Safety Recommendation IRLD2022009 does not specifically refer to Amateur-Built Aircraft. It refers to the Type Certification procedures of the Czech Light Aircraft Association, as overseen by the Ministry of Transport of the Czech Republic.

The AAIU notes that the response of the Ministry of Transport of the Czech Republic includes the statement that 'The review of the type-certification process for the ABA type in question did not identify any deficiencies in the LAA CR processes'. However, during the Investigation it was noted that an error in the Weight and Balance (W&B) documentation was found for the NG5 (including factory-built versions). An identical error was subsequently found for the NG4 (a factory-built aircraft). The NG4, which was developed in 2007, had a virtually identical cockpit and fuselage layout to the NG5, and the nature of the error uncovered by the Investigation would indicate that the erroneous W&B moment arm for pilot and passenger that was published for the NG4 was also published for the NG5, without this identical error being trapped.

Furthermore, in both the NG4 and the NG5, the documented information provided, indicates that the wing locker moment arm was greater than the moment arm for persons seated in the aircraft, yet in both cases the pilot sits slightly aft of the wing lockers. A simple visual check would have indicated that an error existed in the W&B documentation.

When the Investigation carried out a W&B survey of a factory built NG4, it was apparent that the W&B documentation contained an error for the moment arm for persons seated in the aircraft. The Investigation believes that if the LAA CR had carried out a W&B survey of a factory built NG4 in 2007, this error may have been trapped, and corrected at the time.

The errors noted above indicate deficiencies in the design certification process.

Therefore, the AAIU suggests that the Czech Ministry of Transport reviews its response to Safety Recommendation IRLD2022009.

Response:

In an email dated 22 November 2022, the AAIU received the following from the Safety Investigation Authority of the Czech Republic (UZPLN):

[...] received a brief statement of the Director of the Civil Aviation Department of the Ministry of Transport regarding that part of your question if they wish to make another response to the two SRs, which concerned and was addressed to the Ministry

of Transport. I received the original statement in the Czech language and I am sending you its translation with the approval of the director of the civil aviation department:

‘The Ministry of Transport – Civil Aviation Department will no longer respond in this matter. AAIU can thus publish both our original response and their response.’

AAIU Comment:

The AAIU considers the status of this Safety Recommendation 'Not accepted, closed'