

Airworthiness Bulletin

AWB 27-023 Issue 1 – 2 November 2021

Cicare CH-7B Tail Rotor Pitch Control System

An Airworthiness Bulletin is an advisory document that alerts, educates and makes recommendations about airworthiness matters. Recommendations in this bulletin are not mandatory.

1. Effectivity

All Cicare' S.A. rotorcraft, all amateur built experimental category rotorcraft.

2. Purpose

To inform owners and operators of serious vibrational issues being encountered by operators of Cicare' CH7B rotorcraft.

3. Background

Two recent separate incidents have highlighted that Cicare' rotorcraft encountered increased vibrations at the tail rotor section of the rotorcraft. The two separate incidents have occurred in addition to two accidents that were investigated by the Australian Transport Safety Bureau (ATSB) investigations (ATSB Investigations AO-2014-086 and AO-2015-089). The recent incidents involved the Tail Rotor Gear Box (TRGB) departing the tail boom, the second with excessive vibrations following unapproved repairs to the pitch control mechanisms.



Figure 1. Tail Rotor Gearbox departed from CH7 tail boom section.



At this time, the airworthiness concern described in this Airworthiness Bulletin is not considered an unsafe condition that would warrant an Airworthiness Directive to be issued under Part 39 of the Civil Aviation Safety Regulations 1998.

4. Recommendations

Operators and maintainers should follow manufacturer's maintenance instructions for continued airworthiness and be acutely aware of increases in vibrational feedback via the rotorcraft flight control inputs.

The addition of all modifications including heli-carry baskets/pods, additional fuel tanks, or removable doors be conducted IAW manufactures approval or CASR 21 approved design data.

Similarly, all repairs outside of the manufacturer's maintenance instructions should be accomplished IAW manufactures approval or CASR 21 approved design data.

Finally, owners are to ensure that their rotorcraft have a CASA Experimental Certificate issued on completion of assembly, and that an approved CAR 30 maintenance organisation complete the appropriate track and balance of main and tail rotor systems prior to the rotorcraft's first flight.

5. References

- ATSB Report AO-2014-086
- ATSB Report AO-2015-89

6. Reporting

Report any defects to CASA via the Defect Reporting Service available on the CASA website.

7. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

AirworthinessBulletin@casa.gov.au

or in writing, to:

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