

Safety Information Bulletin

Airworthiness - Operations

SIB No.: 2024-08

Issued: 23 July 2024

Subject: Misidentification and Erroneous Selection of Propeller Feathering Controls in Flight

Ref. Publications:

Government of Nepal Aircraft Accident Investigation Commission (AAIC) [Final Report](#) on the accident of ATR72/212A version 500 (Registration: 9N-ANC) that occurred on 15 January 2023, near Pokhara International Airport (2080/09/12 B.S) dated 28 December 2023.

Applicability:

Operators of large (CS-25) turboprop aeroplanes.

Type Certificate Holders (TCHs) of large (CS-25) turboprop aeroplanes.

Supplemental Type Certificate Holders (STCHs) applicable to large (CS-25) turboprop aeroplanes when the STC might affect propeller feathering controls and monitoring.

Description:

Flight decks of large turboprop aeroplanes are designed in accordance with the applicable Certification Specifications for Large Aeroplanes (i.e. CS-25) to prevent inadvertent movement of propeller feathering controls. However, the AAIC Final Report in reference concluded that the most probable cause of the accident was the *“movement of both propeller condition levers to the feathered position in flight, which resulted in the feathering of both propellers”* causing a *“subsequent total loss of thrust leading to an aerodynamic stall and collision with terrain”*.

The AAIC further listed contributing factors to the accident, identifying *“Human factor issues such as high flight crew workload and stress”* which could have contributed to the *“misidentification and selection of both propellers to the feathered position”*.

The above shows that misidentification and erroneous selection of the propeller feathering controls in flight, if not promptly detected and recovered by the flight crew, will result in loss of thrust and could result in loss of control of the aeroplane.

Following an erroneous selection of the propeller feathering controls to the feathered position in flight, several flight crew alerts and cockpit indication systems are necessary for the recognition of the abnormal condition by the flight crew, so that corrective actions can be initiated promptly. The different alerts and indications available in the cockpit can vary and primarily depend on the flight deck design architecture of each individual aircraft type/model but, in this human error scenario, the abnormal condition should trigger flight crew alerts and/or cockpit indication changes (e.g. Master Caution and/or Warning, loss of torque, propeller speed drop, engine ITT reduction, etc.). The above indications may be accompanied by sensory perceptions (e.g. no thrust reaction in case of engine power increase, changes in aircraft noise levels, etc).

This is information only. Recommendations are not mandatory.



This SIB is issued to raise awareness on the safety risk linked to erroneous selection of the propeller feathering controls to the feathered position in flight. This SIB also highlights typical aircraft cockpit elements that should help flight crews to detect and promptly recover from such human error before an unsafe situation develops.

At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant Airworthiness Directive (AD) action under Regulation (EU) [748/2012](#), Part 21.A.3B. and does not warrant the issuance of an operational directive under Commission Regulation (EU) [965/2012](#), Annex II, ARO.GEN.135.

Recommendation(s):

Operators of large turboprop aeroplanes are recommended to:

- Make their flight crew members aware of the importance of reporting flight crew errors, including erroneous selection of propeller feathering controls. A propeller feathering control movement error that may endanger the safe operation of the aircraft should be identified by flight crew alerts and cockpit indications. Without prejudice to Regulation (EU) No [376/2014](#), such flight crew errors, even when rapidly recognised and recovered, should be reported under ORO.GEN.160 (b) to the competent authority, to the organisation responsible for the design of the aircraft and, if applicable, to the applicable STCHs as part of the mandatory occurrence reporting scheme due to the human factor implication in the incorrect operation of the controls. In this regard, see also [EASA SIB 2023-08](#).

TCHs of large turboprop aeroplanes and, if applicable, STCHs applicable to large turboprop aeroplanes are recommended to:

- Assess their approved cockpit design architectures, along with the assumptions about expected normal flight crew behaviour as applied at time of the flight decks certification, in the aim to:
 - identify the involved flight crew alerts and cockpit indications which would be triggered in the event of an erroneous selection of the propeller feathering controls in flight; and
 - ensure that this information is part of the applicable aircraft documentation and made available to Operators of their aeroplanes.

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate.

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