Safety Information Bulletin

Operations

SIB No.: 2013-05R1

Issued: 23 June 2025

Subject: Manual Flight Training and Operations

Revision:
This SIB revises EASA SIB 2013-05 dated 23 April 2013.

Ref. Publications:
EASA SIB 2010-33 on Automation Policy.
EASA SIB 2013-02 on Stall and Stick Pusher Training.
Commission Regulation (EU) 965/2012 of 5 October 2012.
[DELETED]
FAA Advisory Circular (AC) 120-123 Flight Path management dated 21 November 2022.
[DELETED]

Applicability:
National Aviation Authorities (NAAs) and Aeroplane Operators.

Description:
Modern aeroplanes are commonly operated using auto-flight systems (e.g. autopilot or auto-throttle/auto-thrust). Generally, automation has contributed substantially to the overall improvement of flight safety by increasing the timeliness and precision of routine procedures and reducing the opportunity for errors and the associated risks to the safety of the flight. It also generally decreases workload, allowing flight crews to dedicate more attention to monitoring activities and maintaining situational awareness.

Nevertheless, continuous use of automated systems does not contribute to maintaining pilot manual flying skills. According to studies and publications on the topic, the continuous use of auto-flight systems could lead to potential degradation of the pilot's ability to cope with the manual handling of the aeroplane. A pilot is normally required to revert to manual flight operation in case of automation failure or disconnection, or when an aircraft is dispatched with an inoperative auto-flight system.

Automation policies of operators', which include provisions for manual flying, vary significantly across Europe, spanning from mandating the use of full automation at all times, except take-off and landing (when not required by operations), to encouraging disconnecting the automation whenever possible, below a certain altitude/flight level.

The original issue of this SIB was issued to remind NAAs and operators of the importance of manual flying during recurrent simulator training and also, when appropriate, during flight

operations. The overall aim is to reach an appropriate balance between the use of automation and the need to maintain manual flying skills of the pilots.

Since the issuance of the original issue of this SIB, FAA published in 2022 AC 120-123 providing extensive guidance and recommended practices, which may support development of operational policies and procedures to support effective flight path management, in conjunction with the Evidence Based Training (EBT) principles and the content of this and other relevant SIBs published by EASA. However, while the FAA AC suggests the possibility of extensive manual flight during normal operations, EASA believes that a careful assessment should be performed in establishing the conditions under which manual flying skills can be trained/exercised in CAT operations.

At this time, the safety concern described in this SIB does not warrant the issuance of a Safety Directive (SD) under Commission Regulation (EU) 965/2012, Annex II, ARO.GEN.135.

Recommendation(s):

Operators are encouraged to consider incorporating emphasis of manual flight operations, as a means of maintaining basic flying skills, into their training programme and, when feasible, line operations.

Operational principles should be developed by operators and included in their automation policy. The operator should identify appropriate opportunities for pilots to practice their manual flying skills, taking into account factors such as:

- Phase of flight;
- Workload conditions;
- Altitude/Flight Level [non-Reduced Vertical Separation Minima (RVSM];
- Meteorological conditions;
- Traffic density;
- Air Traffic Control (ATC) and Air Traffic Management (ATM) procedures;
- Pilot and crew experience;
- Operator operational experience.

Note: This is not a complete list of potential factors. It is also important that pilots clearly understand the circumstances under which automated systems have to be used, such as during high workload conditions, while operating in traffic congested airspaces, or when following airspace procedures that require the use of autopilot for precise operations.

Therefore, the conditions and procedures for manual flying should be clearly described in the operator's manual.

Furthermore, processes like Safety Management Systems (SMS) and Flight Data Monitoring (FDM) should be used by operators to closely monitor the potential impact on the number, magnitude and pattern of deviations from consolidated average flight precision, to effectively balance the benefits and the drawbacks of manual flying and adjust policies accordingly. Operators should therefore tailor their training programme based on available data and in line with EBT principles.

Competent NAA's and operators are advised to work together to ensure that the content of this SIB is incorporated into operational policies, provided to pilots during theoretical training, and reinforced during practical training.

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