



AERONAUTICAL CIRCULAR - AC/ALD-OPS/01/2021

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2 March 2021

1. Subject:

LIFTING THE BAN ON OPERATING THE B737 MAX AIRCRAFT IN THE KINGDOM OF BAHRAIN AIRSPACE.

2. Purpose:

This Aeronautical Circular (AC) specifies the requirements for B737 MAX Return To Service (RTS) in Bahrain's airspace.

3. Effective Date:

This AC is effective 2 March 2021 and shall remain in force until otherwise notified by Bahrain Civil Aviation Affairs (BCAA).

4. Applicability:

This AC is applicable to all Airlines intending to operate flights to or from the Kingdom of Bahrain, or overfly Bahrain airspace, using Boeing 737-8 (MAX) or Boeing 737-9 (MAX) Aircraft.

5. Introduction

5.1 Following two tragic accidents (Lion Air Flight 610 on October 29, 2018 and Ethiopian Airlines Flight 302 on March 10, 2019). BCAA and in the interest of safety, ban the operation of Boeing 737-8 and Boeing 737-9 aircraft in Bahrain's airspace.

5.2 The result of safety investigations by the FAA and EASA confirmed that the malfunction of Flight Control Computer (FCC) Operational Program Software (OPS)/MAX Display System (MDS) Display Processing Computer (DPC) OPS/a single erroneous high Angle-Of-Attack (AOA) sensor input to the FCC on the affected aeroplane prompting the Manoeuvring Characteristics Augmentation System (MCAS) to an unintended attitude input, have been the contributory factors for the accidents referred above.

5.3 As a result of those findings, Boeing developed new OPS for FCC and MDS DPC and issued the associated service Bulletins to provide instruction for OPS n service installation. Boeing also updated the applicable flight crew training programme, introducing new training to ensue pilot understanding of the MCAS functions, the consequences of introducing the new OPS, and the new Airspeed unreliable procedure.





5.4 The FAA had issued a final rule/Airworthiness Directive (AD) that mandates the following actions for Boeing 737 MAX aircraft:

- a) Install new flight control computer software and new 737 MAX display system software;
- b) Incorporate certain Airplane Flight Manual flight crew operating procedures;
- c) Modify horizontal stabilizer trim wire routing installations;
- d) Conduct an angle of attack sensor system test; and
- e) Conduct an operational readiness flight.

5.5 EASA conducted a comprehensive review of the measures proposed by Boeing, including flight testing and considers that these measures adequately address the above described unsafe conditions.

5.6 In consideration of the above and the detailed information from EASA, the FAA and Boeing, BCAA has decided to lift the ban on the operation of Boeing 737 MAX aircraft in the the Kingdom of Bahrain airspace, effective 2 March 2021.

6. Return To Service Requirements for Boeing 737-8 and Boeing 737-9 (Boeing 737 MAX) aircraft

6.1 BCAA, in exercise of its powers under Article 9, Article 10(4), (7) & (9), Article 32 (1), (2) & (3) and Article 36 (3) of Civil Aviation Law No.14 of 2013 of the Kingdom of Bahrain, directs:

The operators intending to operate Boeing 737-8 (MAX) and 737- 9 (MAX) from or to the Kingdom of Bahrain or intending to overfly Bahrain's airspace, shall comply with the National Civil Aviation Regulations of the state of registry in this regard and submit a "Statement of Compliance" from the National Civil Aviation Authority of the state of registry, assuring that

- (a) the subject aircraft demonstrates compliance with RTS directives issued by either FAA or EASA depending upon the aircraft's Type Certification basis accepted by the National Civil Aviation Authority of the state of registry, and
- (b) compliance to the Flight Crew training requirements stipulated in the directives issued by either FAA or EASA depending upon the aircraft's Type Certification basis accepted by the National Civil Aviation Authority of the state of registry.



Undersecretary for Civil Aviation Affairs

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