

Continued Airworthiness Notification to the International Community

To: Civil Aviation Authorities

Date: March 18, 2020

From: Federal Aviation Administration
Aircraft Certification Service
Compliance & Airworthiness Division, AIR-700

Subject: This message provides information regarding the FAA's continued operational safety activities related to the potential loss of stale-data monitoring function of the CCS (common core system) on The Boeing Company (Boeing) Model 787-8, -9, and -10 airplanes.

Situation description: Boeing has informed the FAA that the stale-data monitoring function of the CCS may be lost after 51 days (1,000 hours) of continuous airplane power. This could lead to undetected or un-announced loss of CDN (common data network) message age validation, combined with a CDN switch failure. The CDN handles all the flight-critical data (including airspeed, altitude, attitude, and engine operation). The potential loss of the stale-data monitoring function of the CCS, after 51 days of continuous airplane power, could result in erroneous flight-critical data being routed and displayed as valid data, which could reduce the ability of the flightcrew to maintain the safe flight and landing of the airplane. Currently, there are no requirements for a Model 787 airplane-level power cycle every 51 (or less) days.

Aircraft/engine make, model, and series: Boeing Model 787-8, -9, and -10 airplanes

U.S.-registered fleet: 196 airplanes; **Worldwide fleet:** 961 airplanes

Operators: Aeromexico, Air Austral, Air Canada, Air China, Air Europa, Air France, Air India, Air New Zealand, Air Tahiti Nui, Air Tanzania, All Nippon Airways, American Airlines, Avianca, AZAL Azerbaijan Airlines, Bamboo Airways, Biman Bangladesh Airlines, British Airways, Brunei Government, China Eastern Airlines, China Southern Airlines, Crystal Luxury Air, Deer Jet, EgyptAir, El Al Israel Airlines, Ethiopian Airlines, Etihad Airways, EVA Airways, Gulf Air, Hainan Airlines, Japan Airlines, Jetstar Airways, Juneyao Airlines, Kalair, Kenya Airways, KLM Royal Dutch Airlines, Korean Air Lines, LATAM Airlines Chile, LOT - Polish Airlines, Neos, Norwegian Air Sweden, Norwegian Air UK, Norwegian Long Haul, Oman Air, Presidential Flight, Qantas, Qatar Airways, Royal Air Maroc, Royal Brunei Airlines, Royal Jordanian, Saudi Arabian Airlines, Saudi Ministry of Finance and Economy, Scoot, Shanghai Airlines, Singapore Airlines, Suparna Airlines, Thai Airways International, TUI Airlines Belgium, TUI Airlines Netherlands, TUI Airways, Turkish Airlines, United Airlines, Uzbekistan Airways, Vietnam Airlines, Virgin Atlantic Airways, Vistara, WestJet, Xiamen Airlines, ZIPAIR Tokyo.

Ongoing activities: On February 14, 2020, Boeing released Alert Service Bulletin B787-81205-SB420045-00, Issue 002, for Model 787-8, -9, and -10 airplanes. The service information describes procedures for repetitive cycling of the airplane electrical power. Prior to the release of the Boeing service bulletin, Boeing notified all operators by issuance of multi-operator message MOM-MOM-20-0036-01B, dated January 18, 2020, and Boeing Alert Service Bulletin B787-81205-SB42-0045-00, Issue 001, dated January 28, 2020, containing instructions similar to those released in the service bulletin. The FAA is in the process of issuing an Immediately Adopted Rule (IAR) airworthiness directive to mandate the actions specified in the Boeing alert service bulletin as interim corrective action. When the FAA issues this IAR it will require operational changes to the affected aircraft, and civil aviation authorities with these aircraft on their registry should take actions they deem necessary to assure their Air Carriers adopt the referenced procedures. The FAA is working closely with Boeing to develop a terminating action.

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****Note:** This information is for the use of civil aviation authorities only and should not be released to the public at this time.