## **Continued Airworthiness Notification to the International Community**

To: Civil Aviation Authorities

Date: June 1, 2019

From: Federal Aviation Administration (FAA) Aircraft Certification Service System Oversight Division, AIR-800 2200 South 216th Street Des Moines, WA 98198

**Subject:** This message provides information regarding the FAA's continued operational safety activities related to certain Boeing Model 737-700/800/900 (737 NG) and 737-8/-9 (737 MAX) airplanes equipped with certain Leading Edge Slat Tracks.

**Situation description:** Boeing Commercial Aircraft (BCA) has informed the FAA of a Notice of Escapement (NOE) regarding certain 737NG and 737MAX Leading Edge Slat Tracks that may have been improperly processed during manufacture, and may not meet all applicable regulatory requirements for strength and durability.

Boeing notified the FAA of the NOE regarding certain 737NG and 737MAX Leading Edge Slat Tracks, processed at a Boeing sub-tier supplier, that were not processed in accordance with the approved process specification. Following an investigation conducted by Boeing and the FAA Certificate Management Office (CMO), we have determined that up to 148 parts (Leading Edge Slat Tracks) are affected. These affected parts are not serialized, therefore Boeing is unable to identify the specific airplanes by Boeing serial number on which the affected parts were installed. However, Boeing has identified groups of both 737NG and 737MAX airplane serial numbers on which these suspect parts may have been installed. Boeing and its supplier determined that the affected parts could be positively identified by part lot stamp on each part, which can be determined by an on-airplane inspection.

The affected parts may be susceptible to premature failure - cracks initiating and propagating due to hydrogen embrittlement resulting from the processing discrepancy. Boeing determined that complete failure of a Leading Edge Slat Track could result in separation of a Leading Edge Slat Panel that could potentially strike the airplane (fuselage or empennage). While there is a low probability of a Leading Edge Slat Panel separating and striking the airplane in an adverse location and orientation, Boeing is unable to eliminate all the risk exposure to passengers that could result from the panel striking the fuselage or loss of airplane controllability that could result from damage to the horizontal stabilizer. Boeing has recommended expedited, mandatory maintenance action to identify and remove the discrepant parts from service. The FAA concurs with Boeing's safety determination, and will issue an Immediately Adopted Rule (IAR) to mandate Boeing's service actions to identify and remove the discrepant parts from service.

**Aircraft/engine make, model, and series:** The Boeing Company Model 737-700/800/900 (737 NG) and 737-8/-9 (737 MAX) airplanes equipped with certain Leading Edge Slat Tracks.

Affected U.S.-registered fleet: 32 737NG airplanes and 33 737MAX airplanes as of June 1, 2019

Affected Worldwide fleet: 133 737NG airplanes and 179 737MAX airplanes as of June 1, 2019

**Operators:** 

As of June 1, 2019, 33–737NG operators worldwide: 9 AIR, Aeroflot – Russian Airlines, Aeromexico, Air Changan Co., Ltd., Air Canada, Air China, Air India Express, Air Italy S.P.A., Alaska Airlines, All Nippon Airways Co., Ltd., American Airlines, Cayman Airways, China Eastern Airlines, China Southern Airlines, China United Airlines, Ltd., Comair Ltd., Copa Airlines, Delta Air Lines, Derivative A/P Prog-USN, Donghai Airlines, Eastar Jet, Enter Air SP.Z.O.O., Ethiopian Airlines Group, Fiji Airways, FlyDubai, Fuzhou Airlines Co., Ltd., Globus Airlines, Gol Linhas Aereas, Hainan Airlines Holding, Hebei Airlines Company, Ltd., Japan Transocean Air, Icelandair, Jeju Air, JET2.COM, Ltd., Jet Airways, Joyair, KLM Royal Dutch Airlines, Kunming Airlines, Lion Air, Lot Polish Airlines, Lucky Air, Nordwind Airlines, MIAT Mongolian Airlines, Norwegian Air International, Norwegian Air Norway, Norwegian Air Sweden, Okay Airways Company, Ltd., Oman Air (SAOC), Pobeda Airlines LLC, Qatar Airways, Royal Air Maroc, Shandong Airlines, Shanghai Airlines, Southwest Airlines, Shenzhen Airlines, Silkair, Smartwings, SpiceJet, Urumqi Air, Pobeda Airlines, LLC, RyanAir, Solaseed Air, Sunwing Airlines Inc., Tassili Airlines, Transavia Airlines, TUI Airways, TUI Fly, TUI Fly Netherlands, TUI Fly Nordic, Turkish Airlines, A.S., United Airlines, Westjet Airlines, Xiamen Airlines.

As of June 1, 2019, 49–737MAX operators worldwide: 9 Air, AeroMexico, Air Canada, Air China, Air Italy S.P.A., American Airlines, Cayman Airways, China Southern Airlines, Comair Limited, Copa Airlines, Easter Jet, Enter Air SP. Z.O.O, Ethiopian Airlines Group, Fiji Airways, FlyDubai, Fuzhao Airlines Co., Globus Airlines, Gol Linhas Aereas, Hainan Airlines Holding, Icelandair, Jet Airways, Kumming Airlines, Lion Air, Lot Polish Airlines, Lucky Air, Miat Mongolian Airlines, Norwegian Air International, Norwegian Air Norway, Norwegian Air Sweden, Okay Airways Company Limited, Oman Air (SAOC), Qatar Airways, Royal Air Mardoc, Shandong Airlines, Shanghai Airlines, Shenzhen Airlines, Silkair, Smartwings A.S., Southwest Airlines, Spicejet, Sunwing Airlines Inc., Tui Airways, Tui Fly, Tui Fly Netherlands, Tui Fly Nordic, Turkish Airlines, United Airlines, Westjet Airlines, Xiamen Airlines.

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