

**GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
LOK SABHA
UNSTARRED QUESTION NO. : 662
(To be answered on the 13th December 2018)**

REVIEW OF AIRWORTHINESS CERTIFICATION

662. SHRI B. SENGUTTUVAN

**Will the Minister of CIVIL AVIATION
नागर विमानन मंत्री**

be pleased to state:-

- (a) whether the recent unexpected crash of a fairly new Boeing 737 Max 8 plane in the stable of the Indonesian Airline Lion Air killing all on board was due to the defects, niggles and glitches in the aircraft that resulted in auto-drive situation;
- (b) whether the Ministry is aware that the legal heirs of the deceased passengers have instituted legal proceedings against the Boeing company over the defective in-flight safety equipment provided in the aircraft that resulted in the crash, if so, the details thereof;
- (c) whether any other international carriers have also found fault with the instrumentation provided in the aircraft as defective;
- (d) whether any Indian Airline company is also operating Boeing 737 Max 8 in its fleet, if so, the details thereof; and
- (e) whether any proactive steps have been taken by the DGCA to ensure the safety of the passengers travelling in it post the crash of the Indonesian aircraft, if so, the details thereof?

ANSWER

**Minister of State in the Ministry of CIVIL AVIATION
नागर विमानन मंत्रालय में राज्य मंत्री**

(Shri Jayant Sinha)

(a) As per preliminary report of aircraft accident investigation agency of Indonesia - KOMITE NASIONAL KESELAMATAN TRANSPORTASI (KNKT) repeated failure of Angle of Attack (AOA) sensor in the aircraft causing continuous automatic nose down trim command due to the new feature of Maneuvering Characteristics Augmentation System (MCAS) introduced/incorporated by M/s Boeing in 737 Max 8 aircraft, could be one of the possible causes of accident.

(b) & (c) No information is available in this regard.

(d) Following two airlines each having a fleet of Five Boeing 737 Max 8 aircraft are operating in India:

1.M/s Jet Airways India Limited

2.M/s Spice Jet Limited

(e) In addition to the directive issued by Federal Aviation Authority (FAA) USA, and communication from M/s Boeing, the aircraft manufacturer, the following proactive measures have been taken to ensure the safety of passengers travelling in Indian registered aircraft until the manufacturer comes out with more information/ directives on the issue:

I. Flight Operations aspects:

Airlines to:

(i) Create a flight simulator exercise replicating the defect reported on Lion Air aircraft (to the nearest possible condition as far as practical) and train the pilots to respond to such defects.

(ii) Issue training hand-out/bulletin for the pilots explaining MCAS system in details.

(iii) Issue Operations Circular for pilots with instructions to write down the defect details in aircraft technical logbooks and to debrief with proper briefing to engineer for defect pertaining to runaway stabilizer/MCAS encountered during flight so as to carry out proper defect rectification by the Engineers.

(iv) Issue instructions to pilots to land at nearest suitable airport in case of MCAS activation in flight.

II. Maintenance aspects:

Airlines to advise engineers to:

(i) Take detailed de-brief from pilots in event of runaway Stabiliser/ MCAS activation, including actions taken by them to correct the situation during flight.

(ii) Check Angle of Attack(AOA) input in case of AOA, Airspeed, Altitude, Elevator feel Differential light related defects reported by the pilots.

(iii) Perform defect rectification using interactive Fault Isolation Manual. Digital Flight Data Recorder (DFDR) readout to be performed if facility is available at station.

(iv) To perform verification flight(s) in the event of reported defect on MCAS activation in flight.
