# INTERIM STATEMENT ACCIDENT OF ETIHAD AIRWAYS, FLIGHT ETD-72K (AUH-LHE), B787-900 AIRCRAFT, REGISTRATION NO A6-BLF NEAR ALLAMA IQBAL INTERNATIONAL AIRPORT (AIIAP), LAHORE ON 28-05-2022

### Brief Description

1. On 28<sup>th</sup> May 2022, at approximately 0948 UTC, Etihad Airways Flight ETD-72K, a Boeing 787-900 aircraft bearing registration number A6-BLF, operating from Abu Dhabi International Airport to AIIAP, Lahore encountered severe turbulence during descent at FL200 and landed safely at AIIAP. One (01) Crew member sustained serious injury while seven (07) Crew members and three (03) passengers sustained minor injuries.

## Events during Flight

2. Aircraft initially encountered a significant updraft that dissipated after 6-7 seconds. Aircraft continued through the turbulent air mass for another 3-4 minutes.

3. The flight crew did change their course for a period of time before returning to their previous heading, presumably to avoid the weather.

4. The largest normal load factor excursions occurred during the initial onset of the updraft and when it dissipated. Normal load factor reached a maximum of around 1.8 gs and a minimum of approximately - 0.75 gs.

5. The autopilot automatically disconnected around the time the updraft dissipated, as a sharp left control wheel input was commanded by the crew. The control wheel force override is 26-31 pounds, which was reached during this timeframe. The autopilot was re-engaged about 30 seconds after the onset of the initial updraft.

6. During the approximate 30-seconds of flight under manual control, there was no evidence of flight crew input having exacerbated the acceleration excursions.

7. Maneuver Load Alleviation (MLA) activated throughout, as evidenced by symmetric aileron and spoiler deflection, in addition to the discrete indication of symmetric activation.

8. Engine and wing Anti-Ice protection was automatically turned on probably due to aircraft entering in the clouds.

#### Weather Conditions

9. Aircraft was at a distance from active cells that is typically more than sufficient to avoid problems.

10. It is suspected though not certain that the rapid dissipation of a distant thunderstorm, in combination with dry near-surface air and being downwind of the cell, created a strong downdraft/outflow boundary which propagated further than normal from the parent cell and was flown through.

11. Possible stable layer near incident altitude probably contributed to turbulence propagation.

12. About 20 minutes prior to the event, AlIAP Automatic Terminal Information Service (ATIS) was updated for weather warning for dust, thunderstorm and rain. It included "Surface wind from North West may gust to 55 knots. Surface visibility may reduce to 800 meters. Raised dust precipitation, Medium to Severe turbulence may occur in few CB Clouds at 3000 feet AGL."

## Medical Summary

13. One (01) Cabin crew sustained serious injury which resulted in Pelvic Fracture injury, while seven (07) Crew members and three (03) passengers sustained minor injuries due to severe turbulence experienced during the event.

#### Way Forward

14. Further analysis of gathered information in combination with contribution report from Accredited Representative (ACCREP) is under progress at AAIB for formulation of conclusions and safety recommendations (if any).

15. Subsequent to the conclusion of investigation and preparation of draft final report, as per pre-finalization requirement of ICAO Annex-13, member states will have the opportunity to review and comment on draft final report. After necessary reconciliation/addressing of the comments received from the member states, the final report shall be made publically available.