



**Government of India
Aircraft Accident
Investigation Bureau
Ministry of Civil Aviation**

Preliminary Report: Serious Incident of Airbus A320 aircraft VT-ATF operated by M/S Air India Express at Bengaluru Airport on 18 May 2024

General Information

Flight No	AIX 1132,
Aircraft details	AIRBUS A320 – 216 WITH CFM 56 5B ENGINES
Owner/Operator	M/s AIR INDIA EXPRESS LIMITED
No. of Persons on board	185 (179 Passengers (177 + 2 Infants) + 06 Crew)
Date and time	18.05.2024 & 2302 HOURS IST(UTC 1732 hrs)
Last Point of Departure	BENGALURU INTERNATIONAL AIRPORT (VOBL)
Point of Intended Landing	COCHIN INTERNATIONAL AIRPORT (VOCI)
Place	BENGALURU
Phase of Operation	DURING CLIMB
Type of Operation	SCHEDULED COMMERCIAL
Runway Elevation	3002 Ft MSL/ 915M
Coordinates of Serious Incident site	13°12'25.79"N (latitude), 77° 42'15"E (Longitude)

Brief description of Serious Incident

On 18.05.2024 Air India express scheduled flight No AIX – 1182 took off from Kempegowda International airport Bengaluru at 1732 UTC for Cochin International Airport on VT – ATF aircraft. The aircraft had total 185 POB including 06 crew members. While the aircraft was on its initial climb the crew heard a bang sound from the right side of the aircraft. The crew also noticed small fluctuation in N1 RPM of No.2 engine and yellow hydraulic System fault momentarily. The no.2 engine stall warning also came on momentarily and went off. The cabin crew on the R2 informed the crew on intercom about fire on right side of the aircraft/engine; however, the crew did not get any warning or indication of fire on the flight deck. The PIC and PM discussed the situation and decided to return back to Bengaluru airport. In view of the fire “MAY DAY” was declared by the PIC and a safe landing was executed at Bengaluru international Airport in coordination with the air traffic services. As per the crew statements both the fire extinguishers were operated to extinguish the fire after landing but the fire still persisted. After the aircraft exited the runway and stopped at link ‘H’ the Crash Fire tenders (CFT) discharged the foam into the engine and extinguished the fire. The crew ordered emergency evacuation of the passengers. All the four slides were deployed by the cabin crew and all the passengers and crews exited from the aircraft safely. 10 passengers suffered minor injuries during exiting from the slides. Injured passengers were treated at the local hospital and were declared fit for travel. Post landing the engine oil quantity in the cockpit indicated 17.5 Quarts on No.1 engine and 7.5 Quarts on No.2 engine.

1.2 Injuries to persons

The aircraft had 179 passengers, 02 (two) aircrew and 04(four) cabin crew on board.

Injuries	Crew	Passengers	Others
Fatal	NIL	---	NIL
Serious	NIL	---	NIL
Minor	NIL	10	NIL

1.3 Damage at aircraft – NIL

1.4 Other Damages – NIL

1.5 Personal information

Crew had valid licenses and was current to operate their flight.

	PIC	PM
License	ATPL	ATPL
Date of Issue	02 May 14	05 Dec 13
Valid upto	01 May 2026	03 Dec 2025
Date of class I Med Exam	18 Nov 2023	01 Mar 2024
Date of Issue of FRTO License	20 Nov 2009	30 Apr 2010.
FRTO License Valid up to	19 Nov 2024	215UL 2025.
Endorsements on PIL	A 320, E 190, E 170, DHC8, P68 , C172	A 320, C 172, PA 334
Total flying experience	8429.03 Hrs.	8400 Hrs.
Total flying experience on type	5526.28 Hrs.	8100 Hrs.
Date of latest flight Checks, Ground classes& refresher	PPC – 23 Mar 2024 IR – 12 Aug 2023 GR – 30 Oct 2023	Flight – 17 Dec 2013 SIM – 02 May 2024 GR – 07 Oct 2023

Crew licenses were current and valid to operate the flight.

Cabin Crew Information

Cabin Crew	A/C Type	Type of TRAINING	TRAINING DATE	VALID UP To
1	A 320	Annual Recent Trg.	14.08.2023	13.08.2024
2	A 320	Annual Recent Trg.	22.08.2023	21.08.2024
3	A 320	Annual Recent Trg.	14.08.2023	13.08.2024
4	A 320	Annual Recent Trg.	14.08.2023	13.08.2024

All crew members had current and valid training records and were fit to undertake the flight.

1.6 Aircraft Information:

The aircraft VT-ATF was manufactured on 28.01.2014 and had a valid certificate of Airworthiness (CoA) and certificate of registration (CoR) on the day of serious incident. The aircraft is owned and operated by AIXL. As per the aircraft log book record the last scheduled major inspection of engine No.2 (Serial Number 569159) i.e. LLP inspection was done at Malaysia on 26.06.2022 at 25913.51 Hrs. (TSN)/17311 cycles (CSN). There were no major snags or repair carried out after the last maintenance on engine. The aircraft was equipped with CFM 56-5B 6/3 engine. The No.2 engine had accumulated 33783:52 Hrs. (TSN) and 22756 cycles (CSN) respectively, since new including the serious incident flight.

Aircraft Type	Airbus A320 - 216
Tail Number	VT - ATF
MSN	6015
C of R Issued on	12.03.2024
C of A Issued	on 20.03.2014
Weight Schedule Approval	Recomputed on 05.03.2024
Insurance validity	Valid thru 30.03.2025
Noise Certificate Issue	Issued on 20.03.2014
ARC Validity	28.03.2025
Engine No. 2 Serial No.	569159
Engine Model	CFM56-5B6/3
TSN	32627:14 Hours
CSN	21,974
Last shop visit	26.06.2022 (For LLP inspection)
Oil Consumption Rate	0.187
Last BSI Findings	Nil
Oil used on	ETO 2380

1.7 Meteorological Information:

Time (UTC) DATE	Wind (Degree/Kt)	Visibility (Metre)	Cloud	Temperature/Dew point (Degree Celsius)	QNH (Hpa)	Weather
1730 18.05.2024	280 /05	6000	SCT 12 Few 25CB SCT 080	23 /21	1013	No SIG.

1.8 Aids to navigation. All navigation and landing aids were serviceable and available for the flight.

1.9 Communications. All communication aids were serviceable and effective at the time of flight.

1.10 Aerodrome Information. Kempegowda international airport Bengaluru has two runways

Runway designation	Length	Width	Approach lights/ILS
09L/27R	4000M	45M	CATI/CATI
09R/27L	4000M	45M	CATIII/CATIII

1.11 Flight recorders. The aircraft is fitted with CVR and DFDR model FA 2100 (L3). Both flight records are located in the tail compartment. Post serious incident CVR & DFDR were in serviceable state and data has been downloaded from both the recorders for analysis.

1.12 Post Landing initial assessment of damage. There was no evidence of any damage to the aircraft or No.2 aero engine during visual examination, however during the Boroscopic examination of the engine No.2 presence of magnetic chips on magnetic chip detector, metallic strands on No.3 scavenge screen plugs filter were found. High pressure turbine (HPT) aft blade strainer outer seal was found dislodged from the position.

1.13 Medical and pathological information. All the crew members had undergone Breath Analyzer test before the flight and results were negative.

1.14 Fire. Fire on No.2 engine Jet pipe was extinguished by the crash fire extinguisher using foam

1.15 Survival aspects. The incident was survivable.

2. Progress of Investigation.

The preliminary phase of investigation has been completed. The count of witnesses has been recorded. The relevant material evidences have been collected. The following actions have been completed: -

- 2.1 The first round of interviews of key witnesses (PIC, FO, Cabin Supervisor, Cabin crew, ARFF team, AIXL Bengaluru Maintenance team and BIAL Safety team) have been completed.
- 2.2 Initial boroscopic Inspection of the engine has been completed.
- 2.3 The data from the recordable devices (DFDR, CVR, PCMCIA, AFTR Recordings, CCTV recordings) have been downloaded for analysis.
- 2.4 Engine fuel sample and oil samples of both the engines and maintenance records have been taken into custody by AAIB for detailed examination.
- 2.5 BEA has appointed Accredited Representative to participate in the investigation. Relevant Information has been shared with BEA for analysis.
- 2.6 Electronic Control Unit of No.2 Engine has been dispatched to OEM for data download and analysis.
- 2.7 Engine No.2 is required to undergo strip examination.

Investigation Incharge: Shri Sanjay Kumar Singh

Investigator: Shri R P Singh