



## 1. General Information

1.	Aircraft	Type	Learjet 45XR
		Nationality	Indian
		Registration	VT- DBL
2.	Owner and Operator	M/s VSR Ventures Pvt Ltd	
3.	Pilot	ATPL Holder	
	Extent of Injuries	Minor	
4.	Co Pilot	CPL Holder	
	Extent of Injuries	Serious	
5.	No. of Persons on board	06	
6.	Date & Time of Accident	14.09.2023, 1132 UTC	
7.	Place of Accident	Mumbai Airport	
8.	Co-ordinates of Accident Site	Lat : 19° 5' 27.9" N, Long: 72° 51' 46.9" E	
9.	Last point of Departure	Visakhapatnam Airport	
10.	Intended landing place	Mumbai Airport	
11.	Type of Operation	Non scheduled	
12.	Phase of operation	Landing	

## 2. Aircraft Information

The aircraft was manufactured in 2009 and had a valid CoA and CoR. As per the CoR, the aircraft was owned and operated by M/s VSR Ventures Private Limited. The last major inspection was 1200 Hrs inspection that was carried out on 11 April 2023. There were no major snags or repair carried out after last major maintenance. The aircraft was equipped with two Honeywell TFE731-20BR-1B engines. The LH Engine had done 3586:34 Hrs and RH Engine had done 4458:50 Hrs before the accident flight.

## 3. Crew information

Both crew had valid licenses and were current to operate this flight.

	PIC	Co-Pilot
License	ATPL	CPL
Date of Issue	21/06/2013	30/03/2021
Valid up to	26/01/2028	29/03/2026
Date of Class I Med. Exam.	26/09/2022	28/11/2022
Class I Medical Valid up to	12/10/2023	19/12/2023
Date of issue FRTOL License	17/04/2001	30/03/2021
FRTOL License Valid up to	30/08/2057	29/03/2026
Endorsements as PIC	C172, PC12 SET, B737 300-900, Learjet 45/75.	N/A On Learjet-45
Total flying experience	6100 Hours (Approx)	540 Hours (Approx)
Total flying experience on type	430 Hours (Approx)	340 Hours (Approx)

#### 4. Aerodrome Information

Chhatrapati Shivaji International Airport (CSIA) is managed by Mumbai International Airport Limited (MIAL) and holds licenses for the operation of both IFR (Instrument Flight Rules) and VFR (Visual Flight Rules) traffic. The airport features two cross runways constructed with asphalt, specifically RWY 09/27 and RWY 14/32.

Each runway is marked with designations, threshold markers, touchdown zones, centrelines, and is equipped with lighting for threshold, edge, end, touchdown zone, and centreline. ATC services are provided by AAI. The Airport Rescue and Fire Fighting Services are classified as Category 10.

#### 5. Weather Information

Weather as per the METAR at Mumbai at the time of accident was as follows:

Time (UTC)	Wind	Visibility	RVR	Temperature	QNH	Weather
1100Z	090/10 knots	1600 m	-	26°C	1005 hPa	SHRA
1106Z	130/05 knots	500 m	700m	26°C	1005 hPa	+RA
1130Z	150/08 knots	800 m	1000m	26°C	1005 hPa	HVY RA

The reports show changing weather conditions with increasing rainfall and reduced visibility.

#### 6. Brief description of accident flight

On 14 September 2023, M/s VSR Ventures owned Lear jet 45XR aircraft VT-DBL was involved in an accident while landing at Mumbai Airport at approximately 11:32 UTC. The aircraft was operating a non-scheduled passenger flight from Visakhapatnam to Mumbai, under the command of a PIC (Pilot in Command, an ATPL holder) and a Co-pilot (a CPL holder). There were six passengers on board.

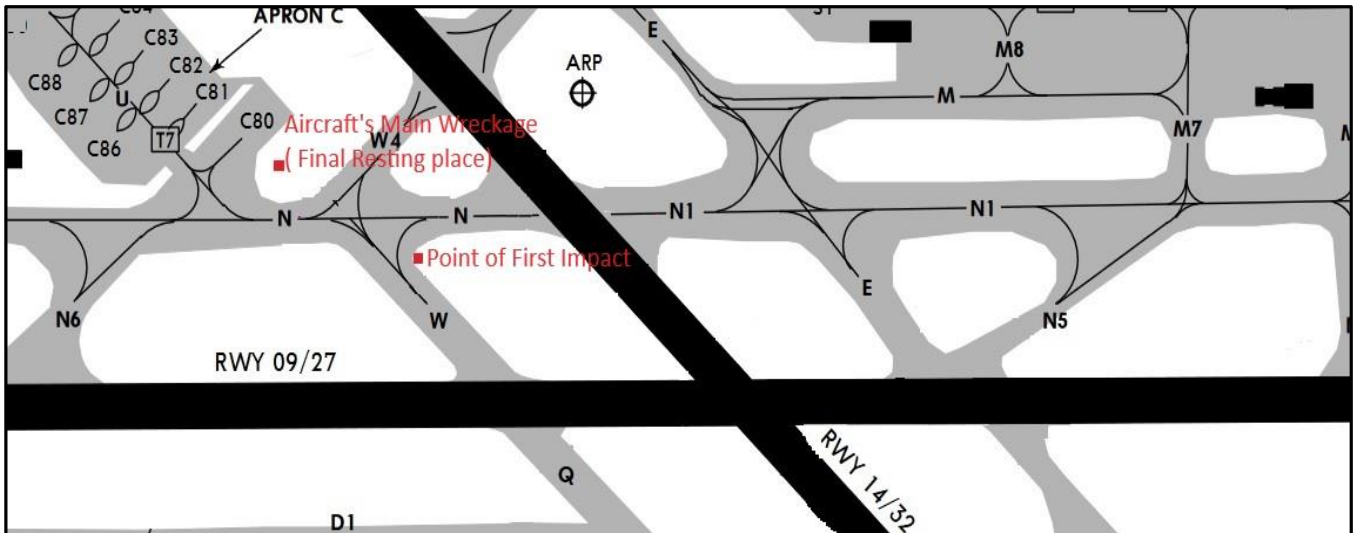
The aircraft took off normally from Visakhapatnam and the flight *en route* was uneventful. The aircraft established contact with Mumbai tower and was instructed to prepare for landing. The aircraft was cleared to land on Runway 27 and was given landing clearance at 113109 UTC. At the time of landing, Mumbai Airport was experiencing heavy rains and reduced visibility. The winds reported to the crew at the time of landing clearance was "WIND 140 DEGREES 7 KTS RWY27".

At 113133 UTC, the crew had runway in sight and they decided to land on Runway 27. The aircraft continuously drifted right of the Runway 27 and moved towards Apron C. About 40 seconds after the autopilot was disconnected, Stick Shaker alert sounded in the cockpit accompanied by a Stall warning. Thereafter, EGPWS warnings were generated and the aircraft crash landed at the shoulder of the intersection of Taxiway W and Taxiway N. As a result, the aircraft's fuselage broke into two pieces and skidded, finally coming to a stop near the intersection of Taxiway U and Taxiway N on an unpaved area (near stand C80).

Following the crash, a fire broke out and fire tenders rushed to the site and extinguished the fire. All occupants of the aircraft were evacuated, but they sustained various injuries due to the impact and were immediately admitted to the nearest hospital. Passengers and PIC were discharged after precautionary treatment. The co-pilot received serious injuries and was admitted for a longer time.

## 7. Wreckage and Impact information

As a result of the impact, the aircraft suffered complete destruction. Initially, it crash-landed on an unpaved area at the intersection of Taxiway W and Taxiway N, causing the fuselage to fracture into two segments and skid, ultimately coming to a halt near an unpaved area close to the intersection of Taxiway U and Taxiway N, near stand C80. Broken parts of the aircraft were scattered along its path (Taxiway N) toward the final stop.



**Figure 1: Point of First Impact and final resting position**

During onsite inspection, it is observed that the Nose section of the aircraft sustained damage. The wing separated, and the forward section of the fuselage broke away from the central fuselage. Both the nose landing gear (NLG) and main landing gear (MLG) were broken. However, the empennage and both engines remained attached to the fuselage. There were scorch marks beneath the right-hand side engine.



**Figure 2: Aircraft's Main Wreckage**

## 8. Progress of the Investigation

1. Flight recorder data has been downloaded at DGCA Flight Recorders Lab.
2. EGPWS (Enhanced Ground Proximity Warning System) and DEES (Digital Engine Electronic System) has been extracted from the aircraft and the units sent to an approved facility for downloading the data.

3. Airframe and engine logbooks, work orders, on-board documents, and major inspection records related to VT-DBL have been gathered from the operator for scrutiny.
4. DGCA documents/files related to Crew and Aircraft are being sought.
5. Statements from witnesses and concerned personnel obtained. Initial statement from the crew have also been obtained.
6. Recordings of radar data, CCTV footage, ATC tape recordings, and hotline communications have been obtained for further analysis.

## **9. Investigation Team**

Investigation In-Charge: Sh. K Ramachandran, Assistant Director

Investigator : Sh. Anandan P, Assistant Director