



**Preliminary Report: Serious Incident involving M/s Red Bird Flight Training Academy Tecnam P2008 JC Aircraft VT-RBT at near Baramati Airport on 22.10.2023**

## 1. General Information

1.	Aircraft	Type	Tecnam P2008 JC
		Nationality	Indian
		Registration	VT- RBT
2.	Owner and Operator	M/s Red Bird Flight training Academy	
3.	Pilot	CPL Holder	
	Extent of Injuries	Minor	
4.	Co Pilot	Student pilot	
	Extent of Injuries	Minor	
5.	Date&Time of Accident	22.10.2023, 01:15 UTC	
6.	Place of Accident	Near Baramati Airport	
7.	Co-ordinates of Accident Site	18°14'56.8"N 74°36'17.9"E	
8.	Last point of Departure	Baramati Airport	
9.	Intended landing place	Baramati Airport	
10.	Type of Operation	Training flight	
11.	Phase of operation	Climb	

## 2. Aircraft Information

The aircraft was manufactured in 2022 and had a valid Certificate of Airworthiness (CoA) and Certificate of Registration (CoR). According to the CoR, the aircraft was owned and operated by M/s Redbird Flight Training Academy Private Limited. As per the aircraft logbook, the last scheduled major inspection i.e 200 hours was carried out on 19.10.2023. There were no major snags or repairs carried out after the last maintenance. The aircraft was equipped with a Rotax 912S2-01 Engine. The aircraft and engine have accumulated 1958:05 hours and 1958:05 hours, respectively, since new before the accident flight.

## 3. Crew information

Crew had valid licenses and were current to operate this flight.

	Instructor	Student Pilot
License	CPL (A)	SPL(A)
Date of Issue	20.12.2018	23.09.2023
Valid up to	19.12.2023	22.09.2033
Date of Class I Med. Exam.	31.08.2023	08.12.2022
Class I Medical Valid up to	17.07.2024	07.12.2023
Date of issue FRTOL License	04.06.2018	-
FRTOL License Valid up to	04.05.2077	-
Endorsements as PIC	P68,C172, Tecnam 2008JC	-
Total flying experience	1113:07 Hours (Approx)	03:00
Total flying experience on type	352:35 (Approx)	03:00

#### 4. Aerodrome Information

Baramati Airport is owned by the Maharashtra Industrial Development Corporation and operated under a lease by Baramati Airport Limited. M/s Redbird had an agreement with Baramati Airport Limited to utilize the facility. The airport is currently uncontrolled and serves as a hub for general aviation and pilot training. Two Flying Training Organisations M/s Carver Aviation and M/s Red Bird Flight Training Academy are based at Baramati. The airfield's elevation is 1996 feet, and Runway 11/29 measures 5500 x 100 feet, with turning pads at both ends. Three taxiways are available to connect the airstrip to two adjacent aprons connecting M/s Carver Aviation and M/s Red Bird Flight Training Academy. ATC services are provided by Carver and Red Bird on a roster basis and advisories are being provided over VHF frequency to pilots engaged in training flights.

#### 5. Weather Information

Weather as per the METAR at Baramati at the time of incident was as follows;

Time (UTC)	Wind	Visibility	Cloud	Temperature	QNH	Weather
01:00	050/06 KT	5000 M	SKC	25 degree C	1019	NOSIG

The reports show weather conditions were good for Flying activities.

#### 6. Brief description of accident flight

On 22 October, 2023, M/s Redbird Flight Training Academy Pvt. Ltd.'s Tecnam 2008 JC aircraft VT-RBT had planned a training flight. The aircraft took off normally from Baramati Airport, and all parameters were within normal ranges. According to the instructor's statement, during take-off, the student pilot failed to maintain the proper pitch attitude. Then, instructor initiated a circuit, and landed. The control was then handed over to the student pilot for another takeoff.

Instructor further stated that the aircraft took off normally. After reaching an altitude of approximately 3000 feet and being 4 nautical miles from the airport, the aircraft experienced engine power loss, and the RPM dropped to idle. Despite applying full throttle, there was no power recovery, and attempts to restart the engine were unsuccessful. Consequently, the crew trimmed the aircraft for best glide speed. The decision was made to execute a forced landing in a field. This situation was promptly communicated to air traffic control, and an emergency was declared. The aircraft performed an emergency landing which resulted in a subsequent topple of the aircraft after impact of nose wheel with boulders. The crew escaped with minor injuries. The aircraft was safely secured by the crew, and there were no reports of fire.

#### 7. Wreckage and Impact information

During the onsite inspection, the aircraft was found in an inverted position. Aircraft made an emergency landing with the main landing gear making the initial contact and subsequently nose landing gear touched the ground. The impact with the boulder caused damage to the nose landing gear, resulting in the aircraft toppling and coming to a complete stop.

Further, damage was observed in the vertical fin, rudder and RH main landing gear. Propeller got broken. Dent was observed on leading edge and root of the both wings.



*Figure 1: Aircraft's Main Wreckage*

## **8. Gathering of Evidence:**

### ***Fuel Records***

M/s Red Bird procures, AVGAS, MOGAS and Jet AV fuel for its operations. About 3000-4000 litres of fuel was observed stored in an open space in the airport premises, without any formal approval for the same. AAIB team demanded records pertaining to fuel procured by M/s Red Bird and sought copies of Fuel Challans, Fuel Procurement Order and Fuel Stock register etc. However, the same was not provided to AAIB team. Some details related to AV Gas was made available but complete details have not been provided.

### ***Flight Performance Data from GARMIN Cockpit***

AAIB team was available at Baramati in connection with investigation of another aircraft accident happened on 19.10.2023. After initial notification of the incident, the team reached the incident site at approximately 1015 Hrs. The aircraft VT-RBT aircraft is equipped with Garmin Cockpit which has the facility for recording flight parameters and storing the data on a SD Card. The SD card from the Garmin equipment was retrieved from the aircraft by the AAIB team. When this card was inserted in the computer, the properties of data files showed that "Date Modified" for all files was on 22.10.2023 between 0830 Hrs and 0850 Hrs. This shows that the card was removed by the M/s Redbird in an unauthorised manner, the data was accessed and modified and card inserted back to the aircraft. The data also did not have parameters related to engine performance.

## **9. Progress of the Investigation**

1. The integrity of data in the SD Card would be checked.
2. Engine and Garmin unit has been quarantined for further analysis.

3. Techlog, engine logbooks, METAR, work orders, on-board documents, and major inspection records related to VT-RBT have been gathered from the operator for scrutiny.
4. Aircraft's fuel and oil samples has been collected for further analysis.
5. Documents/files related to Crew and Aircraft have been sought from DGCA.
6. Initial Statements from witnesses and concerned personnel has been obtained.
7. Efforts are being made to gather all missing information and details from the operator.

#### **10. Interim recommendation**

In view of the fact that crucial evidence like SD Card was removed before arrival of AAIB team without any intimation or permission, it is recommended that necessary action may be taken by DGCA against M/s Redbird Flight Training Academy Pvt. Ltd for obstructing the proceedings of the Investigation Team as per the extant provisions.

#### **11. Investigation Team**

Investigation In-Charge: Sh. Anandan P, Assistant Director

Investigator : Sh. Kanimozhivendhan.G, Assistant Director