

MINISTRY OF INFRASTRUCTURE

AIR, MARINE AND RAILWAY ACCIDENT AND INCIDENT INVESTIGATION UNIT

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In accordance with Annex 13 to the Chicago Convention and Regulation (EU) No. 996/2010 of the European Parliament and the Council on investigations and prevention of accidents and incidents in civil aviation, and based on the fourth paragraph of Article 137 of the Aviation Act (Official Gazette of the Republic of Slovenia, no. 81/10, 46/16 47/19 and 18/23) and the Regulation on the Investigation of Aviation Accidents, Serious Incidents, and Incidents (Official Gazette of the Republic of Slovenia, no. 72/03 and 110/05), the fundamental objective of accident and incident investigations is to improve safety in aviation. **The sole objective of safety investigations is to prevent future accidents and incidents, not to determine fault or liability.**

NOTICE OF COMPLETION OF INVESTIGATION
Accident involving Diamond DA42 Twin Star, Reg. OE-FPV, 30 May 2025, Lesce
Airport - LJBL

GENERAL:

The pilot intended to perform circuit training at his home aerodrome Lesce (LJBL) in order to maintain his multi-engine aeroplane class rating. After completing the pre-flight preparation, he took off from runway 14 at 12:10 LT. According to the pilot's statement, the flight in the traffic pattern was uneventful.

Before the first landing, the pilot completed all procedures required for a safe landing (*Before Landing Procedure*). The landing was uneventful. After touchdown, the pilot performed a Touch-and-Go, maintained the take-off line, and immediately before the next lift-off retracted the aircraft configuration. At that moment, he felt that "something scraped along the runway." The pilot stated:

"I pulled the control column, increased the angle of attack, started to climb, selected flaps to APP, but despite full power the aircraft stopped gaining altitude and the airspeed did not increase. I attempted to level off by lowering the nose even below the horizon."

At approximately 30 metres above ground level, the airspeed still did not increase. Subsequently, despite both engines operating at full power, the aircraft began to lose altitude. The pilot manoeuvred the aircraft away from infrastructure and residential buildings and selected a field for an emergency landing. The aircraft landed on grass approximately 600 metres from the threshold of runway 32. During the off-airfield landing, the aircraft sustained substantial structural damage to the landing gear, lower fuselage, and wings. Upon impact of the left wing with the ground surface, the aircraft rotated approximately 180° relative to the landing direction. The fuselage fractured structurally in the tail section, separating it from the main fuselage. The tailplane and both stabilisers sustained major

structural damage and deformation. At the accident site, more than half of the blades on both propellers were missing.

After the aircraft came to a stop, the pilot shut down both engines, switched off the electrical system, closed the fuel supply, and exited the aircraft. He was not injured.



Figure 1: OE-FPV at the accident site, aligned with the landing direction

Aircraft Information:

- **Aircraft type:** Diamon DA42 Twin Star
- **Manufacturer:** Diamond Aircraft Industries
- **Serial number:** 42.188
- **Year of manufacture:** 2006
- **Registration mark:** OE-FPV (registered with the Austrian aviation authority)
- **Propeller:** 2 x MT-Propeller MTV-6-A-C-F/CF187-129
- **Engine:** 2 x Continental Diesel TAE 122-02-99
- **Total flight hours:** 1383h 38min (as of ARC renewal date, 23 May 2025)
- **Airworthiness certificate:** Valid until 22 May 2025 (SI.CAO.024)¹
- **Maximum take-off weight (MTOW):** 1700 kg²

¹ ARC – Airworthiness Review Certificate. The airworthiness review and renewal were issued by the authorised continuing airworthiness organisation CAO - <https://www.caa.si/en/sicao.html>

² The latest maintenance data were provided by the maintenance organisation M Org. SI.145.07 / CAO011.

Pilot Information:

The pilot, a 70-year-old Slovenian national, held a Private Pilot Licence for aeroplanes (PPL(A)) and a Sailplane Pilot Licence - GPL.

Licences and Ratings:

- PPL(A) licence issued on 22 January 2013 (No. SI.FCL.1654, issued by the Slovenian Civil aviation authority - CAA)
- Class Rating SEP (land), valid from 23 April 2025 to 30 April 2026
- Class Rating MEP (land), valid from 23 April 2025 to 30 April 2026
- Class 2 and LAPL medical certificate issued on 19 May 2025, valid until 27 May 2027

Flight Experience (as of the date of the occurrence):

- Total flight time: 3,035 h 24 min (GPL: 1,770 h; SEP: 762 h; MEP: 503 h 24 min)
- In the last 12 months: 29 h 44 min
- In the last 30 days prior to the occurrence: 0 h 52 min

ANALYSIS:

The Safety Investigation Authority was immediately notified of the occurrence by the responsible personnel at the aerodrome and by the Operational Communication Centre (OKC) Kranj. An on-site investigation was carried out in the presence of the pilot involved in the occurrence and representatives of the Police Stations Radovljica and Kranj.

A survey of the runway was conducted, where traces of impact from both propellers striking the asphalt surface of the runway were documented (Figure 3).

At the initial stage of the investigation, information was obtained from the pilot, the Civil Aviation Authority (CAA), the aerodrome, and the Air Traffic Control Service Provider (KZPS). An inspection of the landing gear system was performed, followed by a functional test during which no malfunctions in the operation of the landing gear were identified.

Based on recorded data, an analysis of the engine parameters during the occurrence was conducted, revealing no deviations or abnormalities that could have influenced the event.

An analysis of the aircraft documentation, pilot records, and the manufacturer's operational documents was also performed. No discrepancies or deficiencies were identified from the review of the aforementioned documentation.

At the time of the occurrence, meteorological conditions were within Visual Meteorological Conditions (VMC) and suitable for flight operations. Weather and air traffic activities within the aerodrome traffic circuit had no influence on the event.

Arhiv - Podatki samodejnih postaj (Izbran datum: 30.5.2025)

Nazaj Primerjaj postaje Prikaži postaje Počisti izbrano Prikaži podatke Pomoč

Prikaz Nabor Spremenljivke Postaje Podatki

Shrani podatke

Lesce letališče lon=14.1718 lat=46.3620 viš=509m	povp. tlak [hPa]	povp. T [°C]	povp. rel. vla. [%]	hitrost vetra [m/s]	sunki vetra [m/s]
2025-05-30 10:00	964	17.3	54	0.8	2.9
2025-05-30 10:30	963	17.8	54	1.7	4.4
2025-05-30 11:00	963	18.6	52	2.3	5.2
2025-05-30 11:30	963	19.6	51	2	4.7
2025-05-30 12:00	963	20.5	50	1.6	3.7
2025-05-30 12:30	962	21.3	48	1.8	5
2025-05-30 13:00	962	22	47	2.7	6.1
2025-05-30 13:30	962	22.2	46	4	7
2025-05-30 14:00	961	22.6	45	3.6	6.7
2025-05-30 14:30	961	23.2	46	3.5	7.4
2025-05-30 15:00	961	23.4	46	3.5	6.7

Figure 2: Meteorological data from the automatic weather station at LJBL

The investigation established that the experienced pilot, while performing a touch-and-go ³landing, made an error in the sequence of aircraft configuration management, specifically between the landing gear (LDG) and the flaps.⁴ The pilot reacted promptly and made an appropriate decision to perform an emergency landing in the take-off direction, thereby mitigating the consequences of the error.

The occurrence was categorised as a human error – Category 1.⁵



Figure 3: OE-FPV - propeller strike marks on the runway during the take-off phase

³ An operation in which an aircraft lands and takes off again on the runway without coming to a full stop or leaving the runway surface. The Touch-and-Go procedure essentially combines two manoeuvres into one – the aircraft lands on the runway, then accelerates and takes off again. This procedure is commonly conducted during training flights or for the purpose of maintaining pilot flying proficiency.

⁴ Flaps are aerodynamic surfaces located on the trailing edge of the wings, designed to change the curvature of the wing profile and thereby influence the amount of lift generated. They enable take-offs and landings at lower airspeeds, thus reducing the required take-off and landing distance.

⁵ Reference: <https://skybrary.aero/articles/human-error-types>

Human error - Category 1 – A person intends to carry out an action; the action is appropriate, but it is performed incorrectly, and the intended goal is not achieved. Such execution errors are referred to as Slips and Lapses. They arise from failures during the execution phase and/or in the storage or sequencing of actions. A Slip relates to observable actions and is typically associated with lapses in attention or perception. A Lapse involves forgetfulness or the omission of an action that should have been carried out.



Figure 4: OE-FPV - position of configuration control levers: left - LDG, right - Flaps

CONCLUSION:

The Safety Investigation Authority, following the analysis of the occurrence and an interview with the pilot, assessed that, based on the established facts and circumstances under which the occurrence took place, no new safety findings are expected in the category to which the motor aircraft involved in this occurrence belongs.

In accordance with Article 5 of Regulation (EU) No. 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation, the Safety Investigation Authority hereby concludes the investigation with this notice.

Ljubljana, 25. 9. 2025

Toni STOJČEVSKI
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