



AIR ACCIDENTS  
INVESTIGATION INSTITUTE  
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CZ-24-1340

# FINAL REPORT

**of a serious incident  
of the sailplane K7 – Rhönadler,  
registration OK-9132,  
in the ATZ of Slaný Airport  
on 8 September 2024**

Prague  
June 2026

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This investigation was carried out pursuant to Regulation (EU) of the European Parliament and of the Council No. 996/2010, Act No. 49/1997 Coll., on civil aviation, and Annex 13 to the Convention on International Civil Aviation. The sole objective of this report is the prevention of potential future accidents and incidents free of determining the guilt or responsibility. The final report, findings, and conclusions stated therein pertaining to aircraft accidents and incidents, or possible system deficiencies endangering operational safety shall be solely of informative nature and cannot be used in any other form than advisory material for bringing about steps that would prevent further aircraft accidents and incidents with similar causes. The author of the present Final Report states explicitly that the said Final Report cannot be used as grounds for holding anybody liable or responsible as regards the causes of the air accident or incident or for filing insurance claims.

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## Abbreviations

AAII	Air Accidents Investigation Institute
AGL	Above ground level
ATZ	Aerodrome traffic zone
BFU	German Federal Bureau of Aircraft Accident Investigation
CAA	Civil Aviation Authority of the Czech Republic
CAVOK	Visibility, cloud and present weather better than prescribed values or conditions
CI	Cirrus – cloud type
CTR	Control zone
DTO	Declared Training Organisation
EASA	European Union Aviation Safety Agency
FCL	Flight Crew Licence
FI(S)	Flight Instructor (sailplanes)
FRS	Fire Rescue Service
LKSN	Airport Slaný
LT	Local time
MTOM	Maximum take-off mass
NIL	None
NNE	North-northeastern
OGN	Open Glider Network – sailplane tracking platform
PPL	Private Pilot Licence
QNH	Atmospheric pressure at nautical height
RWY	Runway
SFD	Sports flying devices
SPL	Sailplane pilot licence
VFR	Visual Flight Rules
VNL	Code of limitations to medical certificates – Valid only with correction for defective near vision
VRB	Variable

## Units

ft	Foot (unit of length – 0.3048 m)
kt	Knot (unit of speed – 1.852 km.h <sup>-1</sup> )

## A) Introduction

Operator: legal entity  
Aircraft manufacturer: Alexander Schleicher GmbH & Co.  
Aircraft type: K7 – Rhönadler sailplane  
Registration mark: OK-9132  
Location of incident: ATZ LKSN  
Event date and time: 8 September 2024, 11:30 LT (all times LT)

## B) Synopsis

On 8 September 2024, the AAll was notified about an occurrence of the K7 – Rhönadler sailplane at Slaný Airport. The foreign student pilot, together with the instructor, was practising Task I/4 – flight on a circuit. During the second flight, after release of the sailplane from the tow plane, the student pilot opened the canopy and left the sailplane. The student pilot did not use the pilot emergency parachute and succumbed to multiple injuries after hitting the ground. The instructor landed the sailplane safely at Slaný Airport despite the damage to the canopy and sailplane unloading.

In compliance with Article 2(1) of Regulation (EU) No. 996/2010, the incident has been classified as a serious incident, taking into account the circumstances of the occurrence.

This Final Report was published in Czech and English versions. In case of conflicts, Czech version shall prevail.

The cause of the serious incident was investigated by the AAll Commission. The investigation team comprised of:

Chair: Ing. Lada Ouhrabková  
Member: Ing. Klára Rejlková  
doc. MUDr. Miloš Sokol, Ph.D., MBA, LL.M., Military Institute of Forensic Medicine

The Final Report was issued by:

AIR ACCIDENTS INVESTIGATION INSTITUTE  
Beranových 130  
199 00 Prague 9 – Letňany

Report date: 1 June 2026

### Report content:

- 1 Factual information
- 2 Analyses
- 3 Conclusions
- 4 Safety recommendations

## 1 Factual information

For the following description, the AAI used witness statements, documentation of the student pilot and instructor, operational and technical documentation of the sailplane, conclusions of the forensic medical examination, OGN record, examinations of both the student pilot's parachute and the sailplane.

### 1.1 History of the flight

#### 1.1.1 Circumstances preceding the critical flight

On 8 September 2024 at 9:00 the student pilot met the instructor and other students at Slaný Airport. According to witnesses, the student pilot spent the night of 7 September 2024 at the airport. After the briefing, the student pilot and instructor performed their first take-off at 11:10 for training flight according to Task I/4 – circuit flight, with the sailplane Schleicher K7 - Rhönadler towed by the aircraft FM 250 Vampire II. The instructor, who was sitting behind the student pilot, testified about this 7-minute flight:

*“During the flight, I pointed out to the student what mistakes he was making and how to correct them. After the landing, I analysed the flight and once again discussed with the student his mistakes: finer movements with the control stick, flying lower behind the tow plane, using (pulling) of the tow-rope release knob three times, turning the first turn late, speed fluctuations, no approaching of the landing line between the second and third turn, watching out for skidding turns, and less pulling up after the flare before landing.”*

#### 1.1.2 Critical flight

According to the instructor's statement:

*“During the second take-off at 11:25, we climbed to circuit altitude through a right turn and on the threshold of runway 07, we lined up with centre line of runway 07 and behind the Slaný-Netovice road, the tow plane gave us the signal to release the tow rope (by wing rocking) at 300 metres above the terrain. The student released the tow rope with just one pull of the knob, on which I commented by saying that it should be pulled three times. That's when I noticed he was opening the canopy. I shouted at him to close it, to which he did not respond and the canopy opened fully. Immediately afterwards, the rear canopy opened, the plexiglass broke and a piece (about 20×20cm) flew off. When I looked in front of me, the student was already getting up from his seat. I yelled at him to sit down, that it was okay and we can handle this. Then the student stood up, I reached for him in an attempt to catch him, but I couldn't reach him. When leaning over, I pushed the control stick forward a little and the speed increased slightly to about 100 km/h, while the centre-of-gravity was set in the nose-heavy position. Immediately afterwards, the student jumped headlong to the left side in the direction of flight. Then I tried to level flight to the horizon and close the front canopy, which I managed to do at the third attempt. I closed and secured the canopy. My speed fluctuated when I was closing the canopy, but I was controlling the sailplane instinctively and had everything under control. The rear canopy remained open. I reduced the speed to about 75 km/h and continued to fly with a greater sink rate due to the open rear canopy. I was in the downwind position of the left circuit to runway 07. I reported my location to the “Slaný Radio” and continued my flight. Before the third turn, I noticed the tow plane was on final approach, so I pointed out to the tow pilot that I was landing with an open canopy, to which the tow pilot reacted by Go-Around. I continued the landing manoeuvre with a planned touchdown within the first third of runway 07. I didn't use the speed brakes because the sink rate caused by the open rear canopy was sufficient.*

*After landing, I asked the persons who had come to pick me up by car if the student had opened the parachute and when they told me they hadn't observed anything, we dialled the emergency telephone number 112."*

Supplementing of the instructor's statement:

*"The first flight was at 11:10 from the airport in Slaný. I was sitting in the rear instructor's seat in the K7-OK9132, and in front of me, there was (student pilot's name) in the student's seat. The tow pilot (name of the tow pilot) was flying the tow plane. Everything was fine before take-off, we just discussed with (student pilot's name) some feedback on his previous flights. Nothing extraordinary. I didn't find him nervous or down or depressed. We took off for the first flight, which lasted about 7 minutes, after which we landed safely. Then we discussed his in-flight errors and some theory and went on to the next take-off. The next take-off was at about 11:23 when we took off to the altitude of 300 m and were located above the airport, above the edge of runway 25. That's when the tow plane signalled to release the tow rope, and (name of the student pilot) did it. The correct way to pull the knob that releases the tow rope is to pull it three times and he pulled it only once. I told him it should be pulled three times, not once. He reached for the canopy release lever instead of the tow release knob. The handles are about 30 cm apart and are colour coded. The tow release knob is yellow and the canopy release lever is red. He opened the canopy and I asked him what he was doing, and to close it. As a result of the opening of his front canopy, my rear canopy opened as well, and thus broke. He started standing up and unfastening the seatbelt. He was wearing a parachute on his back, according to the regulations. I asked him what he was doing, not to jump anywhere and I reached out to catch him, but as I was strapped in, I couldn't. As I was about to reach to catch him, I pushed the control stick forward, increased thus the speed and we started to descend. I was trying to level it and reduce the speed and he jumped out of the sailplane. He didn't say anything. He just suddenly jumped out. From my point of view, I would understand the opening of the canopy as a mistake, but given the fact that he also unfastened the seatbelt, stood up on the seat and jumped out, it was certainly not a mistake. He must have just jumped out like that on purpose.*

*When he jumped out, I was taking care of the sailplane to get it levelled it and trying to close the canopy. I closed his front one, but mine was already exhausted. I reported that I was landing with an open canopy. I didn't say that my student had jumped out. I landed, and then I reported it. The tow pilot who had been towing us before was also in the air at that time, but he couldn't see the jump. After landing, they came for me and saw that I landed with an open canopy and without a student. I was still thinking maybe he opened his parachute. So we called an ambulance, and then we searched the neighbourhood for him. He was normally trained for the parachute, he knew how to open it and use it.*

*When (student pilot's name) came in this morning, he stated that he was medically fit, he had to state that, and he did not seem to be under the influence of alcohol or drugs. Students are not breath-tested."*

1.1.3 From the testimony of the tow plane pilot

On the day of the incident, the tow plane pilot stated that he did not perceive any difficulties or problems with the student pilot prior to the flight. He was rather surprised by what had happened. The student pilot had already performed one flight when the instructor helped him with landing, which is a common thing, but otherwise he was like any other student.

At the time of the incident, he was at the altitude of 300 m when the sailplane was released. The pilot turned the plane to the left towards Slaný and when he completed the 180-degree turn, he could only see the instructor trying to close the sailplane canopy. He did not see the jump and the related situation.

1.1.4 From the testimony of another instructor

The instructor stated that he had flown with the student pilot the day before the critical flight. He did not see any signs of strange behaviour of the student pilot, who neither confided in him nor complained about anything. He behaved as he always did, and so did the other students, and he was treated as such. He was an average student who made quite a lot mistakes, but this is common for pilots starting out like this. He did not stand out among others, and caused no problems. He didn't see him on the day of the incident.

1.2 Injury

Tab. 1 – Injuries

Injured	Crew	Passengers	Other (on ground, etc.)
Fatal	1	0	0
Serious	0	0	0
Minor/None	0/1	0/0	0/0

1.3 Aircraft damage

The sailplane was found to have a minor damage – a broken rear canopy. The seat belts on the student pilot's seat were found unfastened and were not damaged.



Fig. 1 – Damaged rear sailplane canopy

1.4 Other damage

No further damage has been reported to the AAll until the issuance of this Final Report.

## 1.5 Personnel information

### 1.5.1 Student pilot

Male, age: 19 years, foreign national  
 Student's Personal Information Sheet: valid  
 Weight incl. the pilot emergency parachute: 82 kg

The student pilot did not hold a medical certificate as this is only required before the first solo flight.

The student pilot had studied at a university in the Czech Republic and, according to witnesses, spoke Czech well.

#### 1.5.1.1 Student pilot's flying experience

According to the Personal Information Sheet of the student pilot issued by DTO Aeroklub Slaný z.s., the student pilot passed the theoretical part of the training in the period between 3 February 2024 and 23 March 2024. Flight training started on 23 March 2024 by getting acquainted with the sailplane. The familiarisation flight took place on 27 April 2024. The total number of hours flown during sailplane training was 5 hrs 4 min. He performed a total of 34 landings.

The training was conducted in Czech language. According to the logbook, the student pilot flew with a total of six instructors.

AAII could not find any legislative document regulating the maximum number of instructors involved in the flight training of a single student pilot.

Tab. 2 – Excerpt from the student pilot's logbook without the critical flight

Instructor	Date	Flight time (min)	Number of landings
Instructor No. 1	27 April	19	2
Instructor No. 2	26 May	52	3
Instructor No. 2	8 June	54	4
Instructor No. 3	16 June	30	4
Instructor No. 1	30 June	29	4
Instructor No. 3	14 July	22	3
Instructor No. 4	21 July	16	2
Instructor No. 1	31 August	37	5
Instructor No. 5	1 September	31	5
Instructor No. 6	7 September	7	1
Instructor No. 4	8 September	7	1

On the critical day, he was flying with instructor No. 4, who was also the head of training of DTO Aeroklub Slaný, z.s.

### 1.5.2 Instructor

Male, age: 69 years  
 Licence: CZ.FCL.SPL  
 Qualifications and certificates: SPL, FI(S)  
 Medical certificate, class 2: valid until 23 February 2025 with VNL limitation;

Limited radio operator licence: valid until 8 February 2027  
Weight incl. the pilot emergency parachute: 87 kg

#### 1.5.2.1 Instructor's flying experience

Total number of hours flown – all types of aircraft: 1,415 h  
Total number of hours flown on sailplanes: 1,200 h  
Total number of hours flown on the type: 280 h  
Total number of hours flown on sailplanes as an instructor: 771 h  
Number of hours flown on the last 90 days on sailplanes: 16 h  
Number of hours flown in the last 24 hours before the event on sailplanes: 53 min  
The instructor has been a holder of the PPL licence and also flew SFD.

### 1.6 Aircraft information

Schleicher K7 - Rhönadler is a German high-wing, two-seat sailplane. The sailplane has a wooden wing and a welded steel tube fuselage, covered in doped aircraft fabric covering. It is equipped with a two-piece canopy, the fixed landing gear, a tail wheel and another wheel under the front fuselage to make it easier to maintain direction during take-off. The sailplane has a towing hook in the nose and a tow winch hook under the fuselage.

#### 1.6.1 General information

Manufacturer and type: Alexander Schleicher GmbH. & Co., K7  
Year of manufacture: 1961  
Serial number: 1090  
MTOM: 480 kg  
Total hours flown: 4,441 hrs 21 min  
Liability insurance: valid  
Annual inspection: valid until 28 March 2025  
Certificate of airworthiness inspection: valid until 10 April 2025

No malfunctions were reported during the flights prior to the critical flight.

The last maintenance was carried out on 20 August 2024 – 25-hour inspection and lubrication.

At the time of the critical situation, the sailplane was trimmed to “nose-heavy”.

#### 1.6.2 Mass and centre of gravity

AAII made two calculations of weight and centre of gravity during the flight – the flight with two persons on board and the flight after the student pilot had left the cockpit.

Basic calculation information:

- Weight of the student pilot sitting in the front seat 82 kg
- Weight of the instructor sitting in the back seat 87 kg  
(weights of both persons, including pilot emergency parachutes)
- The reference point was located at the leading edge of the second rib.

The last Weighing Protocol and determination of the sailplane's center of gravity was performed on 9 April 2023 with the following findings:

- Empty weight 326.4 kg
- Maximum load (crew, luggage) 153.6 kg
- Maximum take-off mass 480 kg
- Minimum crew weight 65 kg
- Minimum and maximum front seat load 65–110 kg
- Minimum and maximum rear seat load 0–87 kg

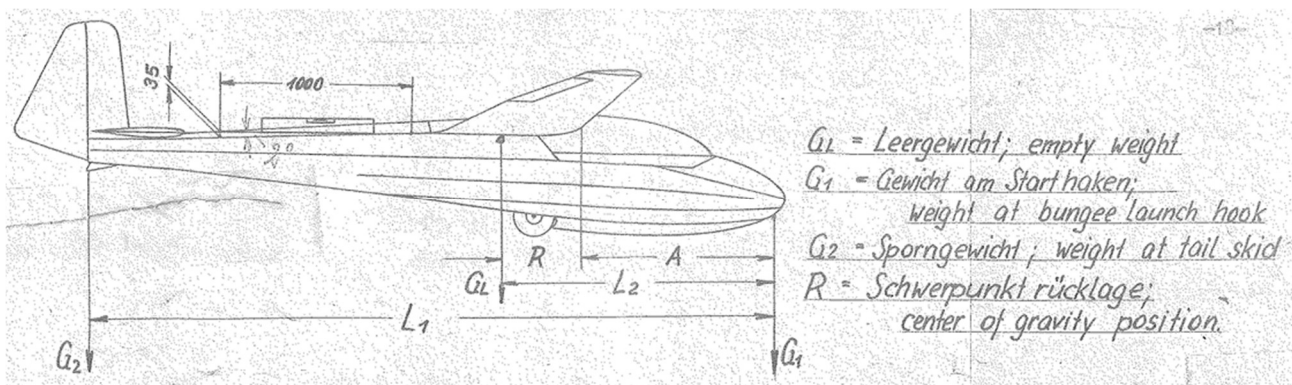


Fig. 2 – Schematic diagram for calculating the centre-of-gravity position (Flight Manual)

According to the Flight Manual, the centre of gravity (C.G.) position could be between 492.5 mm and 592.5 mm from the reference point with an empty weight of 323 kg. The position of the centre of gravity found during the weighing of the empty sailplane was 486.1 mm beyond the reference point with a tolerance of +/-50 mm and was within the limits of the Flight Manual.

According to the Flight Manual, the range of the sailplane's centre of gravity in flight was determined:

- Max. front position: 50 mm beyond the reference point
- Max. rear position: 275 mm beyond the reference point

#### 1.6.2.1 Calculations for the sailplane with the instructor and the student pilot on board

- Calculation of weight  
 Summing up, the weight of an empty sailplane and the weight of the crew, it was found that the maximum load and the maximum take-off mass were exceeded, exactly 15.4 kg.
- Calculation of the centre-of-gravity position  
 According to the available information and the Flight Manual, the centre of gravity was calculated at 151.7 mm beyond the reference point. According to the Flight Manual limits of 50–275 mm, the centre of gravity was within the required range.

#### 1.6.2.2 Calculations with the instructor in the rear seat of the sailplane (after the student pilot left the cockpit)

- Calculation of weight

After the student pilot left the sailplane, the maximum take-off mass was within the limits.

- Calculation of the centre-of-gravity position

The position of the centre of gravity was calculated to be 390.12 mm beyond the reference point, hence 115.12 mm beyond the rear limit.

### 1.7 Meteorological information

#### 1.7.1 Czech Hydrometeorological Institute – Analysis of the meteorological situation

Ahead of the waved cold front that was moving from western Germany further east, a warm air advection from the south to southeast was reaching its peak.

In the area of the incident during the sailplane's flight from Slaný Airport, there was probably a variable (easterly to southeasterly) wind with a speed of  $2-3 \text{ m}\cdot\text{s}^{-1}$ . The visibility was above 10 km, the sky was almost clear with an isolated high Ci type cloud. There were no precipitation or other weather phenomena. The temperature was  $25-27^\circ\text{C}$ .



Fig. 3 – Satellite images of the meteorological situation

#### 1.7.2 Weather from the Slaný RADIO

10:00 120 04 kt CAVOK QNH1012

12:00 VRB 06 kt CAVOK QNH1010

### 1.8 Aids to navigation

NIL

### 1.9 Radiocommunications

At the time of the critical flight, the pilots were on frequency with Slaný RADIO.

### 1.10 Aerodrome information

Slaný Airport is a public domestic airport located 1.3 km south of the town of Slaný. It is suitable for VFR day operation. The airport has two grass runways, 07R/25L with dimensions 760 m × 40 m and 07L/25R with dimensions 760 m × 23 m.

The airport reference point is located as follows: 50° 13' 00" N, 14° 05' 19" E.

The elevation is 1,079 ft / 329 m.

LKSN is located 2 km south of CTR Ruzyně; only southern circuits are allowed.

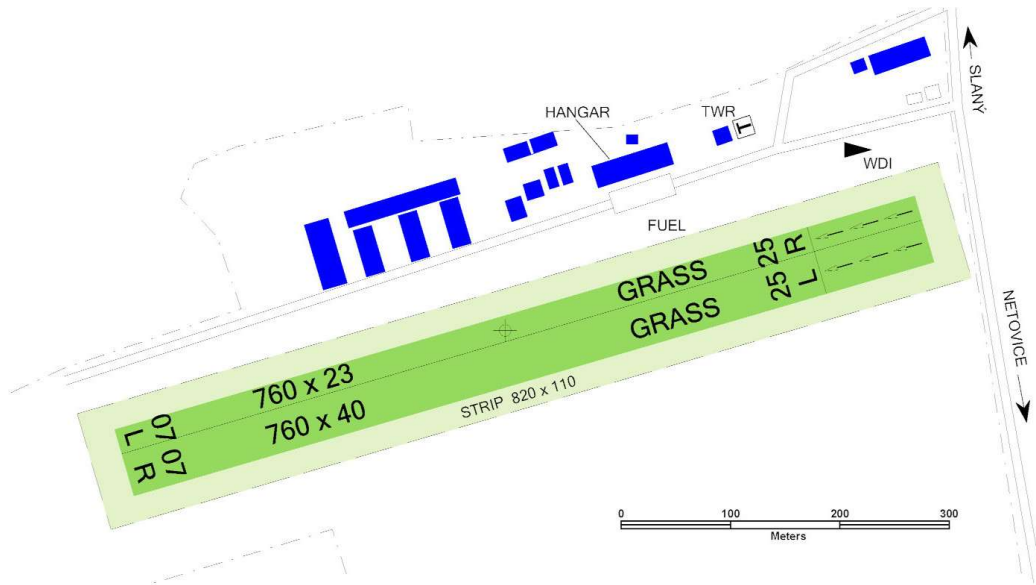


Fig. 4 – Slaný Airport

### 1.11 Flight recorders

The sailplane was not equipped with a flight recorder. The tow plane was equipped with an OGN tracker. The OGN record is shown below in Figure 5.

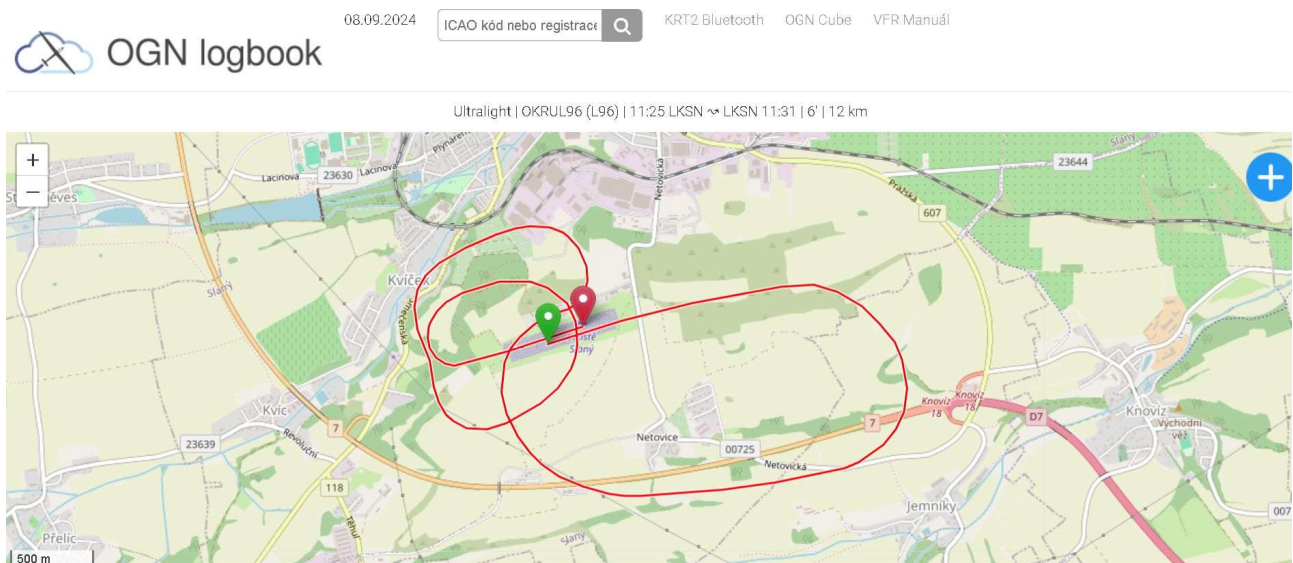


Fig. 5 – OGN towing flight record

### 1.12 Accident site and findings on the wreckage

The critical moment occurred before 1st circuit turn on the LKSN airport circuit RWY 07, after the sailplane was released from the tow plane. The student pilot then immediately unfastened his seatbelt and left the sailplane.

The place of impact of the student pilot's body was in a forest near a field, about 350 m NNE of the airport reference point of Slaný Airport. Impact coordinates: 50°13'10.5"N 14°05'24.4"E.



Fig. 6 – Pilot student's impact location

The instructor landed the sailplane safely within the first third of runway 07R. The sailplane had a damaged rear canopy.



Fig. 7 – Sailplane after landing at LKSN

### 1.13 Medical and pathological information

*The immediate cause of pilot's death was polytrauma (multiple injuries to several organ systems). The pilot died immediately after sustaining the injuries, at the place where his body hit the ground, having previously left the cabin of the sailplane in flight. All injuries showed signs of vital reactions.*

*The pilot sustained multiple severe injuries caused by a blunt force of great intensity, mainly to the head, chest, abdomen, both upper and lower limbs, with injuries to the brain and skull, ribs, thoracic spine, intra-thoracic and intra-abdominal organs, long bones and joints of the upper and lower limbs. The mechanism of the injuries corresponds to a fall from a height, with the front surface of the body hitting the ground in an almost horizontal position.*

*There were no injuries to the pilot's upper limbs, other than those consistent with a fall to the ground, that could indicate that the pilot was unable to actively open the emergency parachute after jumping out of the sailplane.*

*The autopsy has detected no traumatic alterations on the pilot's corpse which could not have been explained by the mechanism of the said accident, such as a projectile wound, etc.*

*The autopsy and subsequent histological examination of the pilot's organ samples did not reveal any morphologically evident pathological changes.*

*The weight of the pilot's body identified during the autopsy was 72 kg, respectively 82 kg when dressed and wearing the emergency parachute.*

*The toxicological expertise did not prove that the pilot had been under the influence of alcohol at the time of the event. Medicinal product Zolpidem has been detected in his blood and urine. The determined blood level of the drug was below the therapeutic range. Zolpidem is a non-benzodiazepine sedative-hypnotic medication used for the short-term treatment of insomnia. Methamphetamine was also found in his blood, urine and stomach contents. The blood level of methamphetamine (pervitin) was 58 ng/ml. The presence of an addictive substance is fundamentally incompatible with the performance of the functions of a pilot. From a general point of view, according to Government Regulation No. 41/2014 Coll., on the determination of other addictive substances and their threshold quantities, the threshold concentration of methamphetamine at which a driver's blood sample is considered to be affected by such a substance, is 25 ng/ml. The said level of 58 ng/ml of methamphetamine can therefore be clearly considered as affecting not only a driver but also an aircraft pilot.*

*Methamphetamine is a central nervous system stimulant. On a mental level, it enhances physical and mental performance, suppresses sleep and fatigue, boosts mood, and increases self-confidence, but all at the expense of the quality of performance and with an increase in error rate. The affected person may experience actual short-circuiting behaviour. Somatic changes, such as increased cardiovascular and respiratory system activity, also occur after ingestion. Long-term use often results in more intense nervousness, anxiety and depression, motor restlessness, absent-mindedness and confusion, with symptoms of aggression, tremor, headache, sweating, loss of activity, and inability to concentrate.*

*The biochemical examination of tissue samples collected during autopsy has been performed to determine the somatopsychic condition. On the basis of the results of the examination, the results of the autopsy and additional laboratory tests, the statistical evaluation of the parameters of the biochemical examination and the analysis*

*of the available data on the course of the flight, it can be stated that the pilot did not survive the sustained injury. Before death, an intense biochemical reaction developed in the body of the deceased with activation of energy metabolism, drawing on the reserve carbohydrates mainly from liver and muscle tissue. There were also statistically significantly increased lactate levels in heart tissue, less in skeletal muscles and brain. Interpretation of the results is impaired by the pilot's condition affected by the use of methamphetamine. However, it can be stated that the pilot was conscious at the moment of leaving the aircraft, reacted with negative psychological emotions that lasted for tens of seconds to minutes, probably with increased tension of skeletal muscles. It is not possible to distinguish whether leaving the sailplane can be considered a psychologically conditioned act (affect, flight reaction, self-destructive behaviour) or a methamphetamine-influenced act.*

*The findings of the comprehensive forensic medical examination clearly indicate that the pilot was under the influence of psychoactive substances that are incompatible with flying duties, as these substances may impair the safe performance of those duties.”*

#### **1.14 Fire**

NIL

#### **1.15 Survival aspects**

On 8 September 2024, at 11:35, emergency line 158 was informed about the student pilot's jump out of the sailplane at a place close to Slaný Airport. Several Czech Police patrols and a search and rescue helicopter searched the area. Later, a helicopter equipped with thermal scanning, a Czech Police drone and a FRS drone were summoned. Also, several FRS and medical units operated on the spot.

The student pilot was found without any signs of life in a forest by a patrol of the Czech Police.

#### **1.16 Tests and research**

##### **1.16.1 Inspection of the pilot emergency parachute**

The pilot emergency parachute was found on the student pilot's body properly strapped without any signs of external damage with the release handle stored in the appropriate place.

In cooperation with a specialist, a detailed examination of the pilot emergency parachute was carried out. During the inspection, no defect or damage was found that would prevent the timely deployment of the pilot emergency parachute.

The parachute was packed and maintained by the sailplane operator in accordance with the manufacturer's instructions.

#### **1.17 Organisational information**

The student pilot was trained in an approved DTO, Aeroklub Slaný, z.s., number 007. The sailplane on which the critical flight was performed was listed among the training aircraft.

## 1.18 Additional information

### 1.18.1 Medical certificate

The obligation to obtain a valid medical certificate is stipulated by below national regulation L1 and Commission Regulation (EU) No. 1178/2011 ANNEX IV Part-MED. Both imply that holding a medical certificate is mandatory for student pilots before their first solo flight.

## L1 Title 2 – PILOT LICENSES AND RATINGS

### 2.2 Student pilot

2.2.1 A student pilot shall meet requirements prescribed by the Contracting State concerned. In prescribing such requirements, Contracting States shall ensure that the privileges granted would not permit student pilots to constitute a hazard to air navigation.

2.2.2 A student pilot shall not fly solo unless under the supervision of, or with the authority of, an authorized flight instructor.

2.2.2.1 A student pilot shall not fly solo in an aircraft on an international flight unless by special or general arrangement between the Contracting States concerned.

### 2.2.3 Medical fitness

A Contracting State shall not permit a student pilot to fly solo unless that student pilot holds a current Class 2 Medical Assessment.

## Commission Regulation (EU) No. 1178/2011 ANNEX IV Part-MED

### MED.A.030 Medical certificates

(a) A student pilot shall not fly solo unless that student pilot holds a medical certificate, as required for the relevant licence.

### 1.18.2 Decrease in medical fitness

The AAII, in cooperation with the CAA of the Czech Republic and EASA, has not been able to find any legislative document governing the conditions for the decrease in medical fitness of student pilots in the same way as that of medical certificate holders, see below.

The said Commission Regulation (EU) No. 1178/2011 ANNEX IV Part-MED applies to the holders of the medical certificate:

### MED.A.020 Decrease in medical fitness

(a) Licence holders shall not exercise the privileges of their licence and related ratings or certificates, and student pilots shall not fly solo, at any time when they:

(1) are aware of any decrease in their medical fitness which might render them unable to safely exercise those privileges;

(2) take or use any prescribed or non-prescribed medication which is likely to interfere with the safe exercise of the privileges of the applicable licence;

(3) receive any medical, surgical or other treatment that is likely to interfere with the safe exercise of the privileges of the applicable licence.

For sailplane pilots, the document EASA Easy Access Rules for sailplanes, resp. Commission Implementing Regulation (EU) 2018/1976 stipulate the following:

SAO.GEN.130 Responsibilities of the pilot-in-command

(f) not perform duties on a sailplane in one of the following situations:

(1) when he or she is incapacitated from performing duties by any cause, including injury, sickness, medication, fatigue or the effects of any psychoactive substance, or feels otherwise unfit;

(2) if applicable medical requirements are not fulfilled;

(h) not allow a person to be carried in the sailplane who appears to be under the influence of psychoactive substances to the extent that the safety of the sailplane or the persons therein is likely to be endangered;

### 1.19 Useful or effective investigation techniques

NIL

## 2 Analyses

On the critical day the student pilot was taking part in circuit flight training with an instructor. According to the witnesses, the first flight was standard, the instructor and the student pilot then discussed the feedback on the flight. The critical moment occurred during the student pilot's second flight of the day.

The second take-off took place from RWY 07 at LKSN at 11:25. The student pilot sat in the front seat, the instructor sat in the back seat. During the right circuit of RWY 07, the tow plane and sailplane climbed to an altitude of approximately 300 m AGL.

Before 1st circuit turn RWY 07, the sailplane was released. According to the instructor's testimony, the student pilot released the tow rope with only one pull on the release knob, on which the instructor commented by saying that it should be three pulls.

Immediately after the release, the student pilot opened the canopy, unfastened the seat belts, stood up and left the sailplane. The instructor tried to prevent this first verbally. Then he tried to reach him.

The rear canopy was opened and damaged immediately after opening of the front canopy.

Pushing of the control stick forward along with the centre-of-gravity being in the nose-heavy position helped the instructor to manage the control forces caused by the sailplane's unloading and the shift of the sailplane's centre of gravity beyond its rear limit.

The instructor leveled the sailplane and at the third attempt managed to close the front canopy. The rear canopy remained open.

In the downwind position between the second and third left turn of RWY 07, the instructor made a routine report to the Slaný RADIO. Before the 3<sup>rd</sup> turn he reported that he was landing with the canopy open. The pilot of towing aircraft aborted the landing and gave the priority for landing to the sailplane.

The instructor then landed the sailplane safely on RWY 07R.

Immediately after the sailplane landed, the instructor and the others called the emergency line and a search for the student pilot was initiated. As the pilot's emergency parachute was not opened during the fall, the location of the impact was unknown.

The body of the student pilot was found about 350 m NNE of the airport reference point without any signs of life.

## 2.1 Student pilot

The student pilot did not show any signs of being under the influence of any substance that could decrease his medical fitness. Before the start of the training, he stated that he was in good health condition.

The first flight of that day was standard according to the witnesses and the instructor testimonies.

According to the instructor's testimony and based on the examination of the sailplane, the pilot emergency parachute and the student pilot's body, the student pilot left the sailplane during the second flight and did not use the pilot emergency parachute during the fall.

During the inspection of the pilot emergency parachute, the AAII found no defect in the deployment element of the parachute. Also, the autopsy showed no injury or other medical limitation to the upper limbs of the student pilot that would have prevented him from deploying the emergency parachute.

According to the autopsy protocol, the student pilot had a psychoactive substance detected in his blood and urine – a sedative-hypnotic which is prescription-only.

According to witnesses from the DTO, the student pilot was acting normally, his behaviour was not weird.

The student pilot had valid training Personal Information Sheet. He was not a holder of any pilot licence.

In accordance with Regulation L1, paragraph 2.2.3 Medical fitness and Commission Regulation (EU) No. 1178/2011 ANNEX IV Part-MED, MED.A.030 (a), holding a medical certificate is mandatory for student pilots before their first solo flight.

## 2.2 Instructor

He held a valid certificate, including instructor rating and a valid medical certificate.

In spite of sailplane's disembarking and shifting of the sailplane's centre of gravity beyond its rear limit, the instructor managed to land the sailplane safely back at the LKSN airport. Pushing of the control stick forward along with the centre-of-gravity being in the nose-heavy position helped the instructor to manage the control of the sailplane.

In accordance with the Commission Implementing Regulation (EU) 2018/1976 par. SAO.GEN.130 (h), the pilot-in-command is responsible not to allow a carriage of a person who appears to be under the influence of psychoactive substances and is likely to endanger the safety of the sailplane or the persons on board.

However, according to witnesses, the student pilot did not show any signs of being under the influence of psychoactive substances.

## 2.3 Sailplane

The sailplane pilots did not report any technical faults during the previous flights.

The rear canopy was damaged. The seat belts on the front seat were unfastened and undamaged.

## 2.4 Mass and centre of gravity

The AAI made calculations of the weight and balance of the sailplane during the flight in a two-man crew and after the sailplane was left by the student pilot.

The calculation showed that the sailplane was overloaded by 15.4 kg when flying with a crew of two; the balance was within the required range.

After the student pilot left the front seat of the sailplane, the sailplane remained loaded only by the instructor sitting in the rear seat. The maximum load was within the required range. The position of the centre of gravity of the sailplane has been shifted beyond the maximum permissible rear limit by 115,12 mm.

## 2.5 DTO

The student pilot flew with six different instructors during his flight training. No legislative documents limited the maximum number of instructors that may be involved in the flight training of a single student pilot.

Frequent changes of instructors for a single student pilot during flight training can lead to the following negative effects, among others:

- Inconsistency in training – instructor's own style, priorities and methods,
- Loss of continuity and pace – instructor's review of what the student pilot has learned and where he has knowledge/skill gaps,
- Lack of personal connection, trust between the student and the instructor,
- Different techniques – e.g. different ways of handling flaps, etc.

## 2.6 Weather

The meteorological situation was suitable for the flight and did not influence the serious incident.

## 3 Conclusions

### 3.1 Findings

#### 3.1.1 Student pilot

- He had valid student's Personal Information Sheet administered by DTO Aeroklub Slaný since February 2024.
- He was not a holder of any pilot licence.
- He did not hold a medical certificate, because this is not required before the first solo flight.
- The student pilot flew in DTO with six different instructors.
- The first flight on that day was free of any issues.

- The student pilot showed no signs of distress, anxiety, mental discomfort or being under the influence of any substance that could decrease his medical fitness.
- The critical flight was his second flight of the day.
- During the second flight, after releasing the sailplane from the tow plane, he opened the canopy, unfastened the seat belts and left the sailplane at an altitude of approximately 300 m AGL.
- According to the forensic physician's opinion, it is not possible to distinguish whether leaving the sailplane can be considered a psychologically conditioned act (affect, flight reaction, self-destructive behaviour) or a methamphetamine-influenced act.
- The AAI had not been able to find any legislative document governing the conditions for the decrease in medical fitness of student pilots.
- The findings of the comprehensive forensic medical examination clearly indicate that the student pilot was under the influence of a psychotropic substances (sedative-hypnotic and central nervous system stimulant), which is incompatible with flying duties, as these substances may impair the safe performance of those duties.

### 3.1.2 Instructor

- He was one of six different instructors who flew with the student pilot in DTO during flight training.
- He was unable to recognize that the student pilot was under the influence of a psychoactive substance, because the student pilot did not show any signs of being under influence.
- He tried to verbally and physically prevent the student pilot from leaving the sailplane.
- After the student pilot left the sailplane, he managed to land safely back at LKSN despite the situation.

### 3.1.3 Sailplane

- Technical condition of the sailplane had no impact on occurrence and course of the serious incident.
- Throughout the flight, the weight and balance limits specified in the Flight Manual were violated.
- The sailplane was overloaded during the flight with a crew of two, the position of the centre of gravity was within the permissible limits.
- After the student pilot left the sailplane, only the rear seat remained loaded, thus the position of the centre of gravity moved beyond the rear permissible limit.

### **3.2 Cause of the serious incident**

The cause of the serious incident was the student pilot leaving the sailplane during a training flight with an instructor. The student pilot was under the influence of psychoactive substances.

## **4 Safety recommendations**

### **4.1 Safety recommendations for the European Union Aviation Safety Agency**

CZ-2026-0005

The AAll issues a safety recommendation for the European Union Aviation Safety Agency to modify the Commission Regulation (EU) No. 1178/2011 ANNEX IV Part-MED, MED.A.030 (a) so that student pilots shall be holder of a valid medical certificate appropriate to the required licence prior to commencing flight training.

### **4.2 Safety recommendations for the Civil Aviation Authority of the Czech Republic**

CZ-2026-0006

With regard to the aforementioned safety recommendation aimed at amending the medical fitness requirements for student pilots prior to commencing flight training, the AAll issues a safety recommendation to the Civil Aviation Authority of the Czech Republic to adopt appropriate measures directed at pilot training organizations to support the early detection and sharing of information regarding non-standard or potentially risky behaviour of student pilots during training, particularly in relation to the possible influence of addictive substances. Furthermore, to establish a uniform procedure for the transfer of relevant information between instructors and for addressing doubts about a student's fitness, including considering notifying the relevant supervisory authority, whereby the continuity of instructional leadership can serve as a supporting factor for training safety.