

## **SUMMARY IN ENGLISH**

On 19 March 2022, an accident occurred at Optand Airport in Jämtland County. The accident occurred during landing. The aircraft deviated from the center line, ended up off the paved runway surface and continued out into the snow-covered runway strip<sup>1</sup>. After 50 metres, the plane overturned and finally ended up on its back. No one was injured but the aircraft was significantly damaged. The damage to the aircraft occurred when the aircraft ended up in the thicker and harder snow-covered part of the runway strip. The runway strip was partially cleared of snow and the snow-free surface extended 1.3 metres from the paved runway edge.

The Swedish Transport Agency's regulations (TSFS 2019:26), state that the width of the runway strip must be at least 10 metres out from each runway edge so that bearing capacity and evenness are such that the risk of damage to an aircraft that inadvertently leaves the runway is minimized. There are no special regulations concerning snow removal from the strip area. Formally, the same requirements apply in both summer conditions and in winter conditions. It is unclear how the requirements for the surface conditions of the runway strip during winter conditions should be interpreted. Thus, there is also a lack of clarity regarding how the snow removal at the affected airports is to be carried out.

The aircraft probably deviated from the center line due to a bounce during landing at the same time as a gust of wind came from the west. The tree line position close to the runway in combination with an unexpected gust of wind has probably created turbulence or a wind shear that has affected the aircraft.

The fact that the damage to the aircraft became significant was due to the relatively thick snow depth on the runway strip, which led to the aircraft tipping forward and ending up on its back.

### **Probable causes**

The control measures taken by the pilot were not sufficient to prevent the excursion and the aircraft ended up on the snow-covered runway strip. The pilot's limited piloting experience has probably contributed to the delayed control inputs.

A causal factor at system level is that the Swedish Transport Agency's regulations on bearing capacity and surface condition on a runway strip do not address specifically snow removal.

### **Safety recommendations**

None.

---

<sup>1</sup> Runway strips are designated areas that surround a runway intended to reduce the risk of damage to aircraft that inadvertently leave the runway.