

## **SUMMARY IN ENGLISH**

The flight was a cross-country flight from the airport in Höganäs to Gothenburg/Säve Airport and back. Before the flight, the pilot contacted the tower and requested a PPR permit for the arrival according to the published routines. Run-way 01/19 at Gothenburg/Säve was shortened from 2,039 to 1,085 metres at the turn of the year 2016/2017. The closed part of runway 01 is about 500 metres long, the pavement is intact and the original markings remain but are vaguely visible. In addition to these markings, there are three large prominent white crosses evenly distributed along the paved surface and a fence that is located 160 metres south of the new threshold.

The airport is controlled and had an active air traffic controller on duty. The pilot had previously trained as a private pilot (PPL) at Gothenburg/Säve between 2012 and 2013. After that, the pilot had flown to and from the airport until the autumn of 2016.

The approach was performed with a sink-rate corresponding to a three-degree slope with only small variations. The touchdown was at the beginning of the paved, cross marked, surface within the closed area. The pilot stopped about 10 metres from the concrete obstacles with the aircraft nose in the direction of the runway. The pilot was unharmed. No damage to the aircraft was observed.

The Accident Investigation Authority conclude that the incident was a repetition of several previous incidents of a similar nature on the same runway. Despite measures taken to improve the painting and obstacle markings, the overall visual impression of the paved surface has been a visually distinctive feature in the flat view angle during the straight in approach from the south. The pilot's intention in this case has thus been to look for the old runway threshold which according to his mental model was still relevant and to land the aircraft there.

### **Causes for the incident**

The incident was caused by the pilot's impression that the runway looked as it did before it was shortened four years earlier. This led the pilot to perform the visual approach towards the beginning of the paved surface on a runway segment that was closed off for air traffic and landed before the declared runway.

The overall shape impression of the runway, in conjunction with the runway length expected by the pilot, was probably a visually distinctive feature that was more dominant than the white crosses.

Several factors may have contributed to the incident:

- The pilot had previously trained at Gothenburg/Säve when the runway was at its full length and was thus well acquainted with the conditions that applied at that time.
- The pilot approached from the south, which led to a cleared straight in approach to the runway. The planned approach to the old threshold, which for the pilot was considered the beginning of the runway, made it difficult to identify the new displaced threshold due to the flat angle to the declared touch down area.
  - The runway markings (designator and the runway threshold) remaining from the runway before it was shortened, were vaguely visible from a short distance, while the valid markings on the declared runway surface had a relatively low color contrast.

- The pilot did not check runway charts available on aviation navigation aids such as the Svenska flygfält or the SkyDemon application.
- The additional mental strain due to the pilot having to compensate for the crosswind during the final approach has probably contributed to the pilot focusing on the old runway threshold and not reconsidering his previous experiences of Gothenburg/Säve and runway 01.

### **Safety recommendations**

The Accident Investigation Authority notes that the airport owner has taken measures to ensure that information about part of the paved area no longer being part of the runway system and that there is a fence south of the new threshold, has been introduced into AIP Sweden.

### **The Swedish Transport Agency is recommended to:**

- Analyse and, if necessary, take measures to ensure flight safety-related runway information shall be available in the AIP also for other non-instrument airports in AIP Sweden.  
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