SUMMARY IN ENGLISH

The runway excursion incident occurred during takeoff from runway 11, on the runway and on the area north of the runway, at Linköping/Saab airport. The flight, which was a flight for personnel transport, was operated by Saab AB in accordance with a valid Air Operator Certificate.

The captain taxied to the runway using the nose wheel steering tiller without any difficulties. After lining up, the crew conducted the daily propeller overspeed test in accordance with the checklist and proceeded directly with the takeoff run. It is clear from the captain's interview that for some reason they omitted to depress the tiller and activate the nose wheel steering. The result was a quick aircraft yaw to the left.

The aircraft left the runway surface with the left main landing gear just before reaching the two diagonal military taxiways, passed one of them and headed back on to the runway where it slowed down and stopped in the middle of the runway.

The air traffic controller in the tower noted that the aircraft yawed abruptly to the left but did not see the aircraft actually leaving the runway surface. After the aborted takeoff, the air traffic controller informed the crew of his observations.

Damage to a runway edge light north of runway 11 at Linköping/Saab airport was discovered by airport personnel and repaired.

Data from the flight data recorders (DFDR and QAR) were available and SHK has analyzed the relevant parameters. However, data from the nose wheel steering angle and brake pressure are not recorded by DFDR/QAR. The nose wheel steering indicated no technical faults before or during the incident.

The current weather and prevailing runway conditions were within the aircraft's limitations. The dry surface allowed for good friction and aircraft control via nose wheel steering and wheel braking.

The take-off was initiated directly from partial power, which resulted in an abrupt course change and provided for only a very limited time to recover before the aircraft left the runway. Contributing was the fact that the nose wheel angle probably was not parallel with the runway heading at brake release. One possible explanation for this could be the aircraft vibrations caused by the propeller test, where both propellers in turn reduce the power momentarily.

The direct cause of the runway excursion was a lapse in activating the nose wheel steering tiller during the initial takeoff phase. This led to a delayed correction of the aircraft's lateral deviation.

A contributing factor may have been that the pilot alternated between flying two aircraft types where the nose wheel tiller is used in different ways.

Safety recommendations

None.