

SUMMARY IN ENGLISH

The accident occurred on 25 July 2015 during take-off from Varberg Airport in southern Sweden and involved a Piper PA-32R-300 (Lance) with registration SE- MDB. The flight carried one pilot and five passengers.

Calculations concerning mass and balance and take-off performance were not performed. SHK calculations show that mass and balance were outside limitations and that available field length was insufficient.

Prevailing weather conditions were light rain and gusty winds.

Two of the passengers used their video devices during the flight, resulting in three movies with audio covering the entire flight.

The shoulder harnesses in the front seats were not used. The passengers did not receive any safety briefing.

The take-off roll was initiated by a 360 degree turn in order to increase available field length.

Immediately upon rotation the stall warning sounded and was activated until the end of the flight. The aeroplane stalled and crashed about 500 metres past the runway end. Fire occurred immediately. The pilot and the passengers evacuated the aeroplane.

Two passengers received injuries that initially were considered as minor. Damage occurred in the terrain and to a fence.

SHK performed a sound analysis, based on the audio information, showing that the engine produced maximum available power during the entire event.

The movies were used to estimate rotation speed, angle of attack and height over threshold.

The accident was caused by lack of operational conditions for a safe flight. This was not observed as current regulations and procedures were not used.

No safety recommendations have been issued by SHK.