

SUMMARY IN ENGLISH

A military jet aircraft of the type JAS 39 C would, in connection with an air-combat exercise the 13th of June 2018, carry out a short-runway landing at Piteå Airport during the return to base flight at Luleå/Kallax Airport. In connection with the touch down, one main landing gear was damaged, after which the pilot aborted the landing and returned to Luleå/Kallax Airport where the aircraft landed with the damaged landing gear.

The investigation has shown that the final approach at Piteå Airport was completed without the aircraft being stabilized, which led to a hard landing. The hard touch down was caused by a too steep approach angle, tailwind and low speed before setting. The damage that occurred at the landing gear has been analysed and was due to an overload. The overload was caused by a too high rate of descend in relation to the aircraft mass in combination with a high nose-up attitude at touch down.

The accident site survey has shown that at a number of landings during the first day of the exercise, the touch down was very close to the runway edge. The shortest measured distance was 17 metres from the edge. Piteå Airport is a civilian airport that had not been used previously for short-runway landings. It does not have a military classification and differs in execution from the military classified runways previously practiced against, among other things, in length and placement of the threshold markings. The threshold marking at Piteå Airport was located 39.5 metres from the runway edge, which differs significantly from the short-runways previously used and whose target points and reference marks were also used at Piteå Airport.

The reconnaissance conducted at Piteå Airport was done without an established method, which meant that vital information was not communicated to the squadron's pilots.

The incident was caused by the landing being completed despite the fact that the approach was not stabilized and that it ended with a too steep approach angle.

Contributing facts were the absence of clear criteria for abort landing in case the flight was not stabilized at a certain point during the approach.

Safety recommendations

The Armed Forces are recommended to:

- Introduce clear criteria for when a short-runway landing should normally be aborted. *(RM 2019:01 R1)*
- Develop and establish a method for producing decision-making documentation for the use of short-runways and runways that are not militarily classified, in order to ensure that conditions relevant to the security on such runways are discovered and that information about them is conveyed to the air operations. *(RM 2019:01 R2)*