

On December 28, 2012, about 1015 Pacific standard time (PST), a Bell Helicopter, Model 407, N407KS, made a hard landing during a ground handling operation at Renton Municipal Airport (RNT), Renton, Washington. King County Sheriff's Department was operating the helicopter as a public aircraft. The commercial pilot was not injured; the helicopter sustained substantial damage to the tail rotor system and to the fuselage. The local law enforcement flight was preparing to depart Renton when the accident occurred. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot reported that the helicopter was located on a raised moveable platform that sits about 18 inches off the ground. ~~and that the~~ back wheels of the dolly were chocked to prevent movement of the cart. While the pilot was preparing for departure, ~~as~~ he increased the throttle, ~~and~~ the helicopter and platform started to rotate. The pilot attempted to stop the rotation by retarding the throttle, but was unsuccessful. The helicopter shifted to the right and the right ~~side of the~~ landing skid came off of the platform. The helicopter stopped spinning and the pilot shutdown all the systems. The helicopter sustained damage to the tail rotor system, fuselage, and the landing gear.

A witness reported that he watched the helicopter become airborne and that it lifted up about 1 foot, shifted forward, and then came down hard on the front of the platform, which caused the platform to rotate. He said that the helicopter began to spin, and as it spun, it tipped rearward, and the tail rotor struck the ground.

The platform was locally fabricated by the King County Sheriff's Department. It consisted of a platform with 8 sets of casters (total of 16 wheels). The sheriff uses these carts to move aircraft in and out of their hangar. With the exception of the 4 rear fixed casters, the remaining 12 casters swivel. The fixed casters (one wheel in each corner of the cart) were chocked to prevent movement of the platform before the aircraft was operated.

Other operators at RNT use similar landing platforms, which use six casters. It was noted that these operators chock all four corner casters to prevent movement of the platform.

As a result of this accident and the subsequent investigation, the operator reported that since they had only been chocking the two rear wheels, it did not lead to very good stability of the platform. They have since modified their landing platforms with scissor jacks mounted on all four corners in addition to chocking the wheels.