



RECORD OF FAA INSPECTOR'S EXAMINATION REPORT

Date/time: August 8, 2017 / 1530 PDT

Person reporting: FAA inspector Danial K. Gilligan, Scottsdale FSDO, Scottsdale, Arizona

Subject: Follow-up examination report of gear and brake system

FAA inspector Gilligan provided the NTSB IIC with an account of his follow-up examination of the airplane landing gear and brake system, in an effort to determine what precipitated the loss of control after landing and subsequent runway excursion. The inspector reported the following:

8/8/2017: Maintenance personnel along with myself met back at AVQ to perform a more detailed review of the aircraft brake system. The system is an air system that works from an engine drive compressor. There is a system pressure relief valve that maintains the system pressure at 300 lbs. There is also a ground service filler for nitrogen to be added before flight if the system loses pressure while the engine is not running. The system was at zero lbs pressure when we arrived to look at the aircraft. This is normal for the system to bleed down to zero when not being operated, especially if the flaps are in the down position (flaps were in the down position). We serviced the brake system with approximately 170 lbs of pressure to test the system. The brake system tested normally. The yoke has a squeeze handle to operate both brakes. If you move the left rudder pedal the system will move the brake pressure to the left wheel. If you move the right rudder pedal the system will move brake pressure to the right wheel. This happens through the brake relay valve. This is a preset pressure of between 80 and 120 lbs to each wheel. The pressure to each wheel was normal at 110 lbs. The brake system appears to be working as designed.

We also performed a test of the tail wheel system and it appeared to be functioning normal. After further review of the skid marks on the runway. It has been determined that they were caused by the left main tire not the tail wheel.

The inspector also reported that in speaking with pilots that flew the Spitfire, that the airplane is very difficult to land on a runway, and that it was made to land in a field or grass [airstrip]. Additionally, he was told that when the brakes get hot the brake system can get very spongy. The inspector also mentioned that the pilot said he had lost the left brake. A survey of the runway revealed a 200-ft skid mark from the left tire on the runway.

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