

Inspector Statement

N600C Hard Landing Accident
Rochester International Airport
Rochester, NY

Date of Accident: 2/11/2023
NTSB ID#: ERA23LA126
Lear 55, N600C, s/ 047

On Monday, February 13, the Rochester NY FSDO AFG-100 received notification of an occurrence on Saturday, February 11th at 17:58Z (12:58 EST) at the Rochester NY International Airport (ROC) involving a Lear 55. The report stated that smoke was observed by a county vehicle trailing behind the aircraft upon roll out after landing on RWY 28. The aircraft continued taxiing even after being advised by ground control that smoke was observed coming from the aircraft, and taxied from RWY 28 all the way to the 700 ramp.

Upon arriving at the USAirports South ramp near Hangar 7, ROC ARFF found that there was no fire, but that the left wing was leaking fuel. Efforts were made to control the spilled jet fuel with absorbent pads and sand. According to the fire department report, the PIC (Christopher Schubert [REDACTED]) was asked to stay behind for technical assistance, but left the area anyway. The SIC (Thomas Cleary [REDACTED]) also left after deplaning the passengers and retrieving their luggage. The winds at the time were 280 at 11 knots and the conditions were VMC.

On Monday, February 13th at 8:42 am EST, FAA Aviation Safety Inspector (Airworthiness) James Seymour with the Rochester NY FSDO, AFG-100-EA23 placed a phone call to Mr. Schubert and asked for a description of what had happened. Mr. Schubert explained that they had left West Palm Beach Airport (PBI) that morning and had an uneventful flight to Rochester. He remarked that there was nothing unusual except that on take-off he felt he was experiencing a crosswind from the right which made the left wing low. He compensated for this and thought nothing more about it. The landing in Rochester he felt was firm, but not one that merited any kind of concern. He felt it was a harder than normal landing which was a bit short, but not one which he felt was an issue. It wasn't until he deplaned that he knew the aircraft was damaged. He deplaned the passengers which consisted of three women and a toddler.

Inspectors arrived at the aircraft on Monday, February 13th around 11:30 EST. Upon observation, it was evident that the aircraft was leaning to the left, and that there were spill pads around the aircraft with evidence of fuel staining on the ground. It had been two days since the accident, so the spilled fuel had been cleaned up. Immediately noticeable were deformations on the top skin of the wing and evidence that the wind skin had warped. Two defects showed the paint had flaked off and the skin was raised due to an impact from the main gear strut directly below. The left spoiler outboard edge was flush with the wing, but the inboard edge was lifted about above wing, indicating that the wing had been bent in an upward direction. The left flap was deformed and the inboard flap hinge mounting bracket was torn out, indicated by several sheared off rivets. The left wing fillet panel was deformed as well. There was no evidence of scraping under the wing tip, so it appears that the wing did not contact the ground.

Inspecting the landing gear strut revealed a crack on the back side running from the bottom of the casting all the way to the top. A bolt used to secure a plug in the top of the strut housing was missing, leaning broken safety wire behind where it had been. The plug was seen protruding from the top of the strut and contacting the top of the wheel well, which is also the wing skin. This plug was the source of the deformation observed on the top of the wing. The strut was completely collapsed with no chrome showing. Additionally, there was no evidence anywhere in the vicinity of hydraulic fluid MIL-H-5606, which one would expect with the damage the strut had suffered.

Both inboard and outboard left main gear wheels were damaged at the brake keyways, where the brake disc lugs engage the wheel. The majority of them were broken off, and the remains were collected by the county when they did a FOD inspection of the runway. The tires showed defects on the

tread and sidewalls where the impacted the runway. Both tires, however, remained inflated. The axles may have been deformed from the impact because the tire appeared to be slightly canted, but the wheels will need to be removed in order to determine the extent of the damage.

An inspection of the rear spar revealed a large crack (approximately 8 inches long) which proceeded from the upper end near the fuselage and widening as it proceeded outboard and downward at approximately a 45 degree angle, spreading to about one half inch at the bottom. The fuel tank was ruptured as a result and exposed to the environment. This is the main source of the fuel leak. It is estimated that approximately 100 to 150 gallons were spilled as a result.

There is no way to determine the integrity of the gear locking mechanism inside the gear actuator or how well the gear able to support the aircraft. Although it appears to be secure, personnel were cautioned by FAA inspectors not to trust it and to stay out from under the aircraft.

After inspecting the aircraft, inspectors contacted the county field supervisor for an escort to the impact site. Monroe County Airport Field Supervisor Sean Cleary arrived at the aircraft and transported inspectors to the runway 28 apron, before the threshold. Tire marks were found on the pavement that exhibited a waviness which indicated that the tires were under stress. It was at this point that the county workers found the wheel parts referred to above. Marks were found for the both left and right main gear, as well as a tire mark from where the nose wheel struck the pavement. The next set of tire skid marks were found in the runway threshold marks. Scars in the pavement were found from the wheels making contact with the runway. This evidence, along with a surveillance video from the terminal, indicate that the aircraft landed short of the runway at a high vertical speed.

On Tuesday, February 14th, inspectors visited CB Aviation which is owned by Mr. Schubert, and recovered the most recent maintenance log book. A review of the maintenance logs did not reveal any recent maintenance that might have had an effect on the accident. There were no inspection overflights or any indication that maintenance had been neglected. The owner of PJM Private Jet Maintenance, and maintenance provider for the aircraft, Mr. Ben Chieffo was contacted and asked about any recent maintenance. His comments agreed with the maintenance log book, and the most recent maintenance was to correct an engine oil leak.

On Wednesday, February 15th, inspectors Seymour and Paul Pryor, an operations inspector, interviewed the SIC, Mr. Thomas Cleary. Mr. Cleary, who was not the pilot flying, stated, when asked about the landing, that he knew it as a firm landing, but not any more severe than what he had experienced in the past. He stated that there was nothing unusual until the tower advised them that smoke was seen coming from the aircraft. He said that the aircraft landed in the touchdown zone as it normally did. The aircraft turned off Runway 28 and proceeded to the south ramp after being cleared to cross runway 25. His first indication of anything amiss was when they deplaned and saw fuel leaking on to the ground. He then deplaned the passengers and went back to retrieve their luggage. Mr. Cleary is not rated in the Lear 55, but holds an ATP. He has around 15 hours in this model aircraft.

On Thursday, February 16th, at 11:00 am, inspectors Seymour and Pryor interviewed Mr. Christopher Schubert, who does hold a Lear 55 type rating, and was the pilot flying during the landing. When asked about the flight, Mr. Schubert recalled that the only thing unusual about the trip was the take-off, and again recounted that the left wing seemed low, but felt it was due to a cross wing from the right during take-off. Both Schubert and Cleary performed walk around inspections of the aircraft before it departed and both concluded that the aircraft was in condition for flight. When they landed, Mr. Schubert admitted that the aircraft had indeed landed short, but this fact did not have an effect on the landing. The landing was a bit harder than he liked but he did not feel that it was detrimental to the aircraft. The aircraft was taxied to the ramp, and Mr. Schubert felt that the smoke observed from the aircraft may have been due to a blown tire.

On Friday, March 17th, the CVR was recovered from the aircraft and secured at the Rochester NY FSDO.

I certify that the above narrative is a true and accurate statement based on the investigation findings.

JAMES P SEYMOUR

