Aircraft Mishap Report
Cessna Aircraft Company

Year: 1982 Model: 402C

Serial Number: 402C0645 Registration Number: N6814A

Mishap Location: Sacramento, CA Date: 1-23-03 Time: 2035 PST

Registered Owner: Redding Aero Enterprises, Inc.
3775 Flight Ave
Redding, CA 96002

Operator: Redding Aero Enterprises, Inc.

Cessna Investigator: Andrew L. Hall
Cessna Report Number: 03-BGVW
Report Date: 5-11-04
Investigator's Signature: [redacted]

NTSB Investigator: Tealeye Cornejo
NTSB Report Number: LAX03FA073
Party Status: Yes

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Summary of Investigation

The 14 CFR Part 135 cargo flight that originated in Ukiah, CA, contacted a light pole and then the ground in a slight nose and left wing low attitude approximately 2,000 feet southeast of the approach end of Runway 22 at Sacramento Mather Airport. The pilot told the FAA IIC, he had started the missed approach procedure for Runway 22, and the left engine did not respond. After contacting the light pole, the aircraft remained airborne for approximately 300 feet over a wooded park area. The aircraft then contacted the ground, slid approximately 200 feet through a fence, and turned sideways coming to rest upright at the edge of a service road. The pilot was able to exit the burning aircraft with minor burns.

The reported weather at Sacramento Mather Airport, CA at 2030 PST was sky, 100 feet overcast; wind 340° at 5 kts; visibility ¼ mile in fog; temperature 12° C, dew point was missing; altimeter setting 30.23 inches of Mercury.

The wreckage had been removed from the mishap site prior to the arrival of this investigator. The entire fuselage, except some of the floor area and aft fuselage, was destroyed by the post-mishap fire. Both wings received extensive fire damage. All of the flight control surfaces were accounted for at the mishap site. The landing gear was extended and the flaps were extended approximately 10°. No airframe system discrepancies were noted during the investigation. Both left and right propellers were observed separated from their respective engines. The investigative team did not observe any pre-mishap engine or propeller discrepancies during the review of the wreckage.

Narrative

History of Flight

The subject flight collided with a light pole, trees, and then terrain while attempting a go-around from the approach for landing to Runway 22 at Sacramento Mather Airport, Sacramento, CA. The pilot indicated to the FAA IIC that he started the missed approach, applied power, and the left engine did not respond. The 14 CFR Part 135 cargo flight originated in Ukiah, CA, (UKI) with a destination of Sacramento Mather Airport. The aircraft contacted a light pole and trees approximately 25 feet above ground level and approximately 300 feet prior to ground contact. The ground scar was an additional 200 feet long. After contacting the ground, the left wing contacted a small pole near the wing root and turned the aircraft sideways (right wing first). The aircraft continued to slide and traveled through a chain link fence. The aircraft came to rest right side up at the edge of a road. The pilot was able to egress the burning aircraft. The mishap site was approximately 2,000 feet to the southeast of the approach end of Runway 22.

Pilot Information

At the time of this writing, the pilot had not yet provided the NTSB IIC with a written statement.

Medical and Injury Information

The pilot sustained burn injuries to his arms and face, and originally declined medical treatment. He was later admitted to the hospital for treatment of burns.

Aircraft Information

The aircraft was originally delivered to Maine Aircraft Corporation in Portland, ME on August 20, 1982. The aircraft was purchased by the current owner on March 7, 1996. The aircraft had been modified with a Piper heated glass panel assembly on the pilot's windshield for deicing. It also had Cleveland wheels and brakes conversion, Brackett air filters, RAM Aircraft Corporation Seamless exhaust slip joints per STC SA4331SW, Vortex generator system STC SA5673NM, and several electrical and avionic modifications. All seats, except for the crew seats, had been removed from the aircraft and the aircraft was being used to haul cargo. The FAA Airworthiness records are Attachment #5 of this report. Aircraft logbooks have not been made available to the investigative team as of this writing.

Witnesses

There are no known witnesses to the event.

Weather Information

The reported weather at Mather Airport, CA at 2030 PST was sky's, 100 feet overcast; wind 340° at 5 kts; visibility ¼ mile in fog; temperature 12° C, dew point was missing; altimeter setting 30.23 inches of Mercury. The control tower personnel indicated to the FAA IIC that they could not see the wreckage from the tower due to the heavy fog. The control tower is approximately 3000 feet to the southwest of the mishap site.

Airframe Examination

Representatives of the NTSB, TCM, and Cessna Aircraft Company reviewed the wreckage at Plain Parts in Pleasant Grove, CA on January 27 & 28, 2003. No pre-mishap discrepancies were noted in the airframe systems.

Fuselage

All of the fuselage except for a section was the floorboard area forward of the main wing spar aft to the rear bulkhead was consumed buy the post impact fire. The tail section of the fuselage exhibited fire damage.

The right main landing gear was observed in the down and locked position. Both the nose and left main landing gear were observed separated from their respective mounts.

Flight Controls and Aerodynamic Surfaces

Both wings outboard of the engine nacelles were damaged by the post-mishap fire. All of the flight control surfaces were accounted for at the mishap site. The horizontal stabilizer and elevator were observed in on-site photographs, taken by the recovery team, to have been separated from the tail section of the fuselage. The vertical stabilizer and rudder remained attached to the tail section of the fuselage. The flaps were observed extended approximately 10°. The aileron trim tab screw jack actuator was measured at .50 inches which equates to approximately 7.5° tab down from neutral. Both the rudder and elevator trim tab screw jack actuators were measured outside the normal limits of travel and were not reliable.

Seats/Restraint Systems/Cabin Environment

The pilot's seat, seat belt, and shoulder harness were destroyed in the post-mishap fire.

Fuel System

The aircraft recovery personnel indicated when the right wing was lifted at the mishap site, fuel was observed draining from the tank area. The left wing fuel tank area was destroyed by the post-mishap fire. The right fuel selector valve was observed in the main tank position. The left fuel selector valve was observed in the off position. There was damage to the wing leading edge near the wing root, which displaced the fuel selector cable. This displacement could have pulled the valve to the off position. Both fuel selector handles were observed, with fire damage, in the cockpit wreckage. Their position could not be reliably established.

Power Plant Examination

The engine review occurred at Plain Parts in Pleasant Grove, CA, on January 27, 2003, prior to the arrival of this investigator. Both engines were observed on January 28, 2003 by this investigator. Both propellers were observed separated from the engines. No pre-mishap discrepancies were noted to either engines or propellers during the review.

According to the NTSB IIC, when the left engine crankshaft was rotated through the accessory drive and internal continuity was established. The left engine was completely disassembled by the NTSB IIC and the Teledyne Continental Motors Representative. Both magnetos from the left engine were rotated and both produced sparks. The left upper spark plugs were observed light gray in color with light wear. Spark plugs #5 and #6 were oil soaked. The fuel pump drive was observed intact and the pump turned freely. The throttle body and fuel-metering unit were observed severely burned. The turbocharger rotated freely. The exhaust system was reviewed from the engine to the inlet of the turbocharger and no discrepancies were noted.

The right engine was not disassembled during the review. The engine crankshaft was rotated through the accessory drive and continuity was established. The fuel pump drive was observed intact and the

pump could be turned by hand. The fuel control screen was observed clean and free of obstructions. The throttle body butterfly was observed near the full open position. The turbocharger rotated freely.

The NTSB IIC retained both fuel control units and both throttle bodies for further evaluation.

The left propeller separated from the engine on the engine side of the crankshaft propeller flange. All three-propeller blades remained in the propeller hub. One blade was observed loose in the hub and displaced toward the flat side of the blade. All three-propeller blades exhibited some chord wise scratching and leading edge damage.

The right propeller separated from the engine on the engine side of the crankshaft propeller flange. All three-propeller blades remained in the propeller hub. One of the blades was observed separated approximately 12 inches out from the hub. The separated section was not observed during the review of the wreckage. The other two blades exhibited some chord wise scratching and leading edge damage. There was forward bending observed near the propeller tips on the two complete blades.

Mishap Site Information

Location: On Airport Latitude: N 38° 33.6' (GPS)
Elevation: ~96 Ft. MSL Longitude: W 121° 16.8' (GPS)
Obstacles Struck Before Principal Impact: Other
Terrain Features: Level Wooded City Area
Terrain Conditions: Hard Dry
Light Conditions: Night
Flight Path: Vertical Angle: ° Magnetic Heading: 156°
Approx. Attitude at Impact: Roll: Level° Pitch: ° Yaw: °