CEN16FA211 Page 1 of 1

NTSB Identification: CEN16FA211

14 CFR Part 91: General Aviation Accident occurred Thursday, June 09, 2016 in Houston, TX Probable Cause Approval Date: 12/12/2017 Aircraft: CIRRUS DESIGN CORP SR20, registration: N4252G Injuries: 3 Fatal.

NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report.

The pilot was attempting to land the airplane at a busy airport with high volume airline traffic. While attempting to sequence the airplane between airplanes, the air traffic controller issued numerous instructions to the pilot, which included changing runways multiple times. The pilot was instructed to go around twice by the local controller; the first time because an air carrier airplane was overtaking the accident airplane and the second time because the airplane was too high to make a safe landing. During the airplane's third approach, a new local controller came on duty. On this approach, the pilot again had difficulty descending fast enough to make a safe landing, and she elected to perform another go-around. The new local controller then issued the pilot a lengthy clearance as the pilot was performing the go-around procedure. Data retrieved from the airplane revealed that, during the go-around, the pilot did not follow the recommended go-around procedure; specifically, the pilot did not attain a speed between 81 to 83 knots indicated airspeed (KIAS) before raising the flaps. Rather, the airplane's airspeed was 58 KIAS when the pilot raised the airplane's flaps while in a left turn, which resulted in exceedance of the critical angle of attack and a subsequent aerodynamic stall and spin into terrain.

Postaccident examination of the airframe and engine did not reveal any anomalies that would have precluded normal operation. The air traffic control instructions given to the pilot during the three approaches were complex and potentially distracting. The initial local controller elected to keep the airplane in the traffic pattern rather than transferring the airplane to an approach controller for resequencing when airline traffic interrupted the pilot's first landing attempt and when the pilot displayed difficulty landing the airplane on her second landing attempt. The complex instructions from the second local controller during the pilot's go-around following her third landing attempt, were unnecessary at that time and likely distracted the pilot from monitoring critical flight parameters.

The pilot was attempting to comply with ATC instructions throughout the flight and the pilot's actions are understandable as the instructions were largely consistent with the pilot's goal to land at the busy airport. However, compliance with ATC instructions greatly increased the pilot's workload as it led to an extended period of close-in maneuvering at a Class B airport due to the larger and faster airplanes converging on the airport. During this extended period of maneuvering the pilot did not assert the responsibilities that accompany being a pilot-in-command and did not offload the workload by either requesting to be re-sequenced, telling the controller to standby, or stating "unable." This allowed for an increased likelihood of operational distractions associated with air traffic communications and affected the pilot's ability to focus on aircraft control.

The National Transportation Safety Board determines the probable cause(s) of this accident as follows:

The pilot's improper go-around procedure that did not ensure that the airplane was at a safe airspeed before raising the flaps, which resulted in exceedance of the
critical angle of attack and resulted in an accelerated aerodynamic stall and spin into terrain. Contributing to the accident were the initial local controller's decision to
keep the pilot in the traffic pattern, the second local controller's issuance of an unnecessarily complex clearance during a critical phase of flight. Also contributing
was the pilot's lack of assertiveness.

Full narrative available

Index for June 2016