Analysis
The pilot was providing airplane rides to family and friends who had assembled at a dry lakebed. He completed two uneventful flights and then departed for a third flight from the lakebed. According to witnesses, the pilot had planned to perform a low pass over the group, and he did so just after takeoff, passing within about 50 ft directly overhead.

The entire accident sequence was captured on video. The airplane dipped its right wing as it passed over the camera position and, after the pass, continued in a climbing right turn, which progressed rapidly to almost 90 degrees of bank. The excessive bank angle resulted in the airplane exceeding its critical angle of attack and experiencing an accelerated stall at an altitude too low for recovery. The airplane then entered the initial stages of a spin before striking the ground in an almost vertical attitude.

Postaccident examination of the airframe and engine did not reveal any evidence of preimpact mechanical malfunction or failure. Although the reason for the aggressive turn could not be determined, the pilot's overflight of the group while maneuvering at low altitude is consistent with an intentionally-performed ostentatious display.

Flight Events
Maneuvering-low-alt flying - Low altitude operation/event
Maneuvering-low-alt flying - Loss of control in flight
Maneuvering-low-alt flying - Aerodynamic stall/spin
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause
The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of airplane control while intentionally maneuvering close to the ground, which resulted in the airplane exceeding its critical angle of attack in a steep bank and entering an accelerated stall.

Findings
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Lateral/bank control-Not attained/maintained - C
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - F
Pilot Information

Certificate: Commercial; Private  Age: 47
Airplane Rating(s): Single-engine Land  Instrument Rating(s): Airplane; Helicopter
Other Aircraft Rating(s): Helicopter  Instructor Rating(s): Helicopter
Flight Time: (Estimated) 1890 hours (Total, all aircraft), 300 hours (Total, this make and model)

Aircraft and Owner/Operator Information

Aircraft Make: AMERICAN AVIATION  Registration: N9454L
Model/Series: AA-1A  Engines: 1 Reciprocating
Operator: On file  Engine Manufacturer: Lycoming
Operating Certificate(s) Held: None  Engine Model/Series: O-320
Flight Conducted Under: Part 91: General Aviation - Personal

Meteorological Information and Flight Plan

Conditions at Accident Site: Visual Conditions  Condition of Light: Day
Lowest Ceiling: None  Wind Speed/Gusts, Direction: 7 knots / , 130°
Temperature: 37°C  Visibility 10 Miles
Precipitation and Obscuration: No Obscuration; No Precipitation
Departure Point: El Mirage, CA  Destination: El Mirage, CA

Wreckage and Impact Information

Crew Injuries: 1 Fatal  Aircraft Damage: Destroyed
Passenger Injuries: 1 Fatal  Aircraft Fire: None
Ground Injuries: N/A  Aircraft Explosion: None
Latitude, Longitude: 34.650000, -117.617500

Administrative Information

Investigator In Charge (IIC): Eliott Simpson  Adopted Date: 03/14/2016
Note: The NTSB traveled to the scene of this accident.
Investigation Docket: http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=89398

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.
The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.