



# Aviation Investigation Final Report

<b>Location:</b>	Teterboro, New Jersey	<b>Accident Number:</b>	CEN17MA183
<b>Date &amp; Time:</b>	May 15, 2017, 15:29 Local	<b>Registration:</b>	N452DA
<b>Aircraft:</b>	Learjet 35A	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Aerodynamic stall/spin	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Positioning		

## Analysis

NTSB investigators traveled in support of this investigation and used data obtained from various sources to prepare this aircraft accident report.

The NTSB's full report is available at <http://www.nts.gov/investigations/AccidentReports/Pages/AccidentReports.aspx>. The Aircraft Accident Report number is NTSB/AAR-19/02.

On May 15, 2017, about 1529 eastern daylight time, a Learjet 35A, N452DA, departed controlled flight while on a circling approach to runway 1 at Teterboro Airport (TEB), Teterboro, New Jersey, and impacted a commercial building and parking lot. The pilot-in-command and the second-in-command died; no one on the ground was injured. The airplane was destroyed by impact forces and postcrash fire. The airplane was registered to A&C Big Sky Aviation, LLC, and was operated by Trans-Pacific Air Charter, LLC, under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a positioning flight. Visual meteorological conditions prevailed, and an instrument flight rules flight plan was filed. The flight departed from Philadelphia International Airport, Philadelphia, Pennsylvania, about 1504 and was destined for TEB.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's (PIC) attempt to salvage an unstabilized visual approach, which resulted in an aerodynamic stall at low altitude. Contributing to the accident was the PIC's decision to allow an unapproved second-in-command to act as pilot flying, the PIC's inadequate and incomplete preflight planning, and the flight crew's lack of an approach

briefing. Also contributing to the accident were Trans-Pacific Jets' lack of safety programs that would have enabled the company to identify and correct patterns of poor performance and procedural noncompliance and the Federal Aviation Administration's ineffective Safety Assurance System procedures, which failed to identify these company oversight deficiencies.

## Findings

<b>Aircraft</b>	Angle of attack - Capability exceeded
<b>Personnel issues</b>	Incorrect action selection - Pilot
<b>Personnel issues</b>	Flight planning/navigation - Pilot
<b>Personnel issues</b>	Flight planning/navigation - Flight crew
<b>Organizational issues</b>	Adequacy of policy/proc - Operator
<b>Organizational issues</b>	Oversight of operation - FAA/Regulator

## Factual Information

### History of Flight

<b>Approach-circling (IFR)</b>	Aerodynamic stall/spin (Defining event)
<b>Approach-circling (IFR)</b>	Loss of control in flight
<b>Approach-circling (IFR)</b>	Collision with terr/obj (non-CFIT)

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### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial	<b>Age:</b>	53, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 28, 2017
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6800 hours (Total, all aircraft)		

## Co-pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	October 13, 2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1200 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Learjet	<b>Registration:</b>	N452DA
<b>Model/Series:</b>	35A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1981	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	35A-452
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	February 15, 2017 AAIP	<b>Certified Max Gross Wt.:</b>	18001 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo fan
<b>Airframe Total Time:</b>	11441 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Honeywell
<b>ELT:</b>		<b>Engine Model/Series:</b>	TFE731-2-2B
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	1550 Lbs thrust
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)
<b>Operator Does Business As:</b>	On file	<b>Operator Designator Code:</b>	1QUA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	TEB,8 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	14:52 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Scattered / 4500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	20 knots / 30 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	350°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.75 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Phillidelphia, PA (PHL )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Teterboro, NJ (TEB )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	15:04 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Teterboro TEB	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	8 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	01	<b>IFR Approach:</b>	Circling;ILS
<b>Runway Length/Width:</b>	7000 ft / 150 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	On-ground
<b>Total Injuries:</b>	2 Fatal	<b>Latitude, Longitude:</b>	40.829444,-74.060279

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Silliman, James
<b>Additional Participating Persons:</b>	Dennis Brown; Teterboro FSDO; Teterboro, NJ Michael Lemay; Bombardier; Montreal David Studtmann; Honeywell; Phoenix, AZ Jonathan Berges; Trans-Pacific Jets Lief Iversen; Trans-Pacific Jets Gary Spears; Bombardier Adam Rhodes; NATCA Tim Keck; NATCA
<b>Original Publish Date:</b>	March 26, 2019
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 1</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=95175">https://data.nts.gov/Docket?ProjectID=95175</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).