Aviation Investigation Final Report

Location:	Santa Rosa, California	**Accident Number:**	WPR16FA059
Date & Time:	January 28, 2016, 18:57 Local	**Registration:**	N9362P
Aircraft:	Piper PA 24-260	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercial pilot and his wife departed on a visual flight rules cross-country flight to their home airport. About 46 nautical miles from the destination airport, the pilot requested an instrument flight rules clearance and was subsequently cleared for an instrument landing system (ILS) approach at the destination airport.

GPS data indicated that the airplane followed a straight course with minimal variation during its cruise flight in a manner consistent with use of the autopilot. The airplane's course movements became more erratic when the airplane neared the destination airport, which suggests that the pilot began to hand-fly the airplane. A combination of radar data, GPS data, and air traffic control audio showed that the pilot complied with the controller's instructions. After the pilot intercepted the glideslope, he maintained a shallow descent rate until the final approach fix. The pilot subsequently crossed the final approach fix 1,000 ft above the intercept altitude on a heading track to the right of the localizer. The tower controller reported multiple deviations over the radio to the pilot, but the pilot did not make appropriate corrections. Radar data showed the airplane enter progressively steeper descent rates after passing the final approach fix, and the airplane began to deviate to the left of the localizer. In the final moments of the flight, the airplane turned to the right about 50°, crossed the localizer, and then immediately began a 60° steep left turn at an approximate 1,200-fpm descent rate. Debris path signatures indicated the airplane was in a high-speed, steep left turn with a nose-down attitude when it impacted a field about 1.5 nautical miles south of the runway approach end. The proximity of the accident site to the final GPS data point and the similarity between the impact signatures and the track shown by the last few GPS data points indicates that the last data points closely represent the airplane's final movements before impact.

Examination of the wreckage and of engine analyzer data did not reveal any evidence of preimpact anomalies with the airframe or engine. Circumferential scoring from the gyros was found on the case of the heading indicator and both attitude indicators, which indicates that these instruments were likely functioning normally at the time of impact.

The pilot obtained weather information from an online service about 24 hours before the flight; however, the forecasts he received were not valid at the time of his departure. In his communication to an Air Route Traffic Control Center (ARTCC) controller, the pilot asked, "what are they doing for approaches?" which indicated that he was aware of possible instrument meteorological conditions (IMC) at the destination airport. The pilot's audio transmissions to ARTCC did not indicate that he had received current Airport Terminal Information System weather. Further, the ARTCC controller did not provide the pilot with the current weather as required by Federal Aviation Administration (FAA) procedure, and the airport tower controller had not been disseminating pilot reports, also required by FAA procedure. The pilot's flight instructors commended his aeronautical decision-making skills; however, the investigation was unable to confirm if the pilot obtained current weather and if knowledge of the low-visibility weather conditions would have altered his decision to continue the flight despite his desire to return home that night.

Two months before the accident, the pilot completed an instrument proficiency check and made a night flight to fulfill the night currency requirement. Other than these two events, the pilot had no recent instrument or night flight experience. Further, the pilot's flight records did not show any evidence that he had completed a flight in night IMC in nearly 3 years. Given the pilot's lack of recent experience in night IMC, he was most likely overwhelmed by the complexity of hand-flying the airplane on an ILS approach in night IMC. Once the pilot crossed the final approach fix, he doubled his descent rate to correct for his high crossing altitude and then deviated from the localizer course line. The airplane's final movements suggest that the pilot likely lost control of the airplane during the large heading adjustment he made to correct his course and was not able to regain control.

Probable Cause and Findings

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

The pilot's failure to maintain airplane control during an instrument approach in night instrument meteorological conditions, which resulted in a collision with terrain. Contributing to the accident was the pilot's lack of recent experience in night instrument meteorological conditions.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	(general) - Not attained/maintained
Environmental issues	Low ceiling - Effect on operation
Environmental issues	Dark - Effect on personnel
Personnel issues	Recent instrument experience - Pilot

Factual Information

History of Flight

Approach-IFR final approach	Other weather encounter
Approach-IFR final approach	Course deviation
Approach-IFR final approach	Loss of control in flight (Defining event)
Approach-IFR final approach	Collision with terr/obj (non-CFIT)

On January 28, 2016, about 1857 Pacific standard time, a Piper PA-24-260C, N9362P, impacted terrain during an instrument landing system (ILS) approach into Charles M. Schulz Airport – Sonoma County Airport (STS), Santa Rosa, California. The commercial pilot and passenger were fatally injured. The airplane was registered to and operated by Tango Charlie Aviation LLC as a 14 *Code of Federal Regulations* Part 91 flight. Night instrument meteorological conditions prevailed at the time of the accident, and a visual flight rules (VFR) flight plan had been filed for the cross-country flight. The personal flight departed Palm Springs International Airport (PSP), Palm Springs, California, at 1535.

According to witnesses, the pilot and his passenger flew from STS to PSP the day before the accident for an overnight stay. A fixed based operator filled the airplane's fuel tanks to capacity as instructed by the pilot, who anticipated an afternoon departure the following day. On the day of the accident, the pilot filed a VFR flight plan and then departed for STS with VFR flight following. He obtained an instrument flight rules clearance from air traffic control (ATC) about 46 nautical miles (nm) from STS and was subsequently cleared to an approach fix on the ILS approach to runway 32 at STS.

The airplane's final movements were captured by a combination of ATC audio and an onboard Appareo Stratus 2 unit that recorded GPS and altitude heading reference system data on an internal non-volatile flash memory chip. At 1833, the pilot contacted Oakland Air Route Traffic Control Center (ARTCC) and reported that he was VFR at 6,500 ft mean sea level (msl). After acknowledging receipt of the STS altimeter setting, the pilot asked the controller "what are they doing for approaches?" The controller informed the pilot that STS was using the runway 32 ILS approach, and the pilot acknowledged the communication. Two minutes later, the pilot requested an instrument flight rules (IFR) clearance, and the controller reported that she had his request. The airplane crossed Scaggs Island VOR, an initial approach fix on the runway 32 ILS approach, at 1837 and then turned to the LUSEE intersection, an intermediate fix on the approach located 12.2 nm from STS.

During the cruise portion of the flight, the airplane flew directly to the assigned waypoints with minimal course variation in a manner consistent with the pilot using the autopilot. The airplane's course variation became more erratic after the airplane passed DACER intersection, a waypoint located 15.5 nm from Scaggs Island VOR.

At 1840, the controller cleared the pilot to STS via radar vectors and instructed him to turn left for traffic and to descend and maintain 5,000 ft msl. The pilot acknowledged and complied with the controller's instructions as indicated by the GPS data. The ARTCC controller then vectored the pilot back toward

the localizer and cleared him to proceed to LUSEE and to maintain 4,500 ft msl. Subsequent GPS data points indicated that the pilot complied with the controller's instructions. At 1850, the pilot was cleared for the runway 32 ILS approach and instructed to cross LUSEE at or above 4,200 ft msl. He acknowledged the instructions and began his descent to the assigned altitude.

At 1851:25, the pilot reported that he missed intercepting the localizer course but was correcting. The controller then advised an STS tower controller that the airplane was arriving late due to the pilot's trouble flying the localizer. The pilot was subsequently handed off to the STS tower controller. GPS data showed that the airplane crossed the final approach fix, located about 6.2 nm from STS, about 1,000 ft above the glideslope intercept altitude. At 1856:06, when the airplane was about 3.3 nm from the airport, the pilot notified the STS tower controller that he was inbound for the ILS. Seconds later, the pilot acknowledged a clearance to land that the controller had issued, which was the pilot's final transmission. About 40 seconds later, the tower controller notified the pilot that he was "drifting right of course" and then informed him that he was "well right of course."

ATC radar data furnished by the FAA was compared to the GPS data points recovered from the Appareo Stratus non-volatile memory unit, which was mounted to the airplane's instrument panel. The two sources produced nearly identical course lines, which showed the airplane intercept LUSEE, an intermediate approach fix, and subsequently maintain a course to the right of the localizer for several nautical miles during the ILS approach. GPS data indicated that the airplane was initially left of the localizer after the airplane crossed PIGPN, the final approach fix. About 2 nm beyond PIGPN the airplane passed to the left side of the localizer. In the next minute, the airplane turned right about 60° and crossed through the localizer, at which time the tower controller reported to the pilot that he was "well right of course." During this time, the airplane's descent rate increased from about 600 feet per minute (fpm) to about 1,200 fpm. The final GPS data points showed the airplane in an approximate 60° left turn, with a 35° nose-down attitude, and on a heading of 302° magnetic. The accident site was about 0.14 nm from the last GPS data point.

Pilot Information

Certificate:	Commercial	**Age:**	69,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	October 22, 2015
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 15, 2015
Flight Time:	1291 hours (Total, all aircraft), 133 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 1.2 hours (Last 30 days, all aircraft)		

The pilot held a commercial pilot certificate with ratings for airplane single-engine land and instrument airplane. He held a second-class medical certificate issued on October 22, 2015, at which time he reported 1,278 total flight hours of which 50 hours were within the previous 6 months. The medical

certificate included one restriction: "must have available glasses for near vision."

A copy of a spreadsheet the pilot used to record his flight time was furnished by the pilot's friend. According to this flight record, the pilot's last instrument proficiency check (IPC), which was his last instrument flight experience was completed in 1.3 hours on November 6, 2015. The IPC instructor reported that the pilot demonstrated good aeronautical decision-making during their discussion of weather planning but struggled in performance, as he kept his airspeed too high during approaches, which resulted in steeper turns. The spreadsheet showed that the pilot had accumulated a total of 93.6 hours of actual instrument flight experience. Before his most recent IPC, the pilot had accrued 4 hours of actual instrument experience and 3.4 hours of simulated instrument experience in the previous year, most of which was in May 2015. The spreadsheet indicated that the pilot had not accumulated any simulated or actual instrument experience between November 6, 2015, and January 2, 2016, the last recorded entry in the spreadsheet. The spreadsheet showed that he had accrued 0.5 total hours of night flight experience in the preceding 2 years. In his most recent night flight entry, dated November 2015, he noted the flight as "Night Current." His most recent experience flying in night instrument meteorological conditions was documented on March 27, 2013.

The pilot's most recent biennial flight review (BFR) was completed on May 15, 2015. The BFR instructor stated that the pilot demonstrated competency in his decision-making skills and piloting abilities during the flight review.

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N9362P
Model/Series:	PA 24-260 260C	**Aircraft Category:**	Airplane
Year of Manufacture:	1969	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	24-4862
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	August 20, 2015 Annual	**Certified Max Gross Wt.:**	3200 lbs
Time Since Last Inspection:	31 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5315.1 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	C126 installed, not activated	**Engine Model/Series:**	IO-540-N1A5
Registered Owner:	On file	**Rated Power:**	260 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

According to Federal Aviation Administration (FAA) records, the airplane was manufactured in 1969 and registered to the pilot on September 9, 2015.

The airplane was powered by a Lycoming IO-540-N1A5, a normally-aspirated, direct-drive, air-cooled, 260-horsepower engine. A work order obtained from a maintenance facility revealed that the most recent annual inspection was completed on August 20, 2015, at which time the airplane had accumulated

5,284.2 flight hours. The entry listed a tachometer time of 214.2 flight hours at the time of the inspection. The tachometer recovered from the accident site showed 245.1 flight hours, which indicated that the airplane had accumulated 5,315.1 total flight hours at the time of the accident.

According to the manufacturer, the airplane was originally equipped with a Piper Auto Control III autopilot system; the airplane's logbook history did not indicate if the system had been upgraded or replaced. According to the BFR instructor, the airplane was equipped with a two-axis autopilot system when he last flew with the pilot in 2015.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	STS,128 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	19:00 Local	**Direction from Accident Site:**	146°
Lowest Cloud Condition:		**Visibility**	2.5 miles
Lowest Ceiling:	Overcast / 400 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.2 inches Hg	**Temperature/Dew Point:**	12°C / 12°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	PALM SPRINGS, CA (PSP)	**Type of Flight Plan Filed:**	VFR
Destination:	SANTA ROSA, CA (STS)	**Type of Clearance:**	IFR;VFR flight following
Departure Time:	15:35 Local	**Type of Airspace:**	Class D

STS was equipped with an automated surface observation system, which transmitted Meteorological Aerodrome Reports (METARs) and special reports surrounding the period of the accident. The observations indicated that VFR weather conditions prevailed at STS in the early afternoon, followed by a deterioration to IFR from the pilot's time of departure until the time of the accident, followed by low IFR (LIFR) conditions about 4 minutes after the accident. LIFR conditions are defined as a ceiling less than 500 ft and/or visibility of 1/2 mile or less.

Multiple special reports for STS were issued throughout the period of the flight, all indicating decreasing visibility and ceilings. The final special report issued before the accident was at 1853 and indicated calm winds, 2 1/2 miles visibility, mist, scattered clouds at 400 ft, an overcast ceiling at 900 ft,and a temperature and dewpoint of 12°C.

A special METAR was issued about 4 minutes after the accident that indicated calm winds, visibility 2 1/2 miles, mist, an overcast cloud layer at 400 ft, and a temperature and dewpoint of 12°C.

Forecasts

The area forecast for the northern California area at the time of the accident included broken clouds at 2,000 ft msl with tops to 6,000 ft msl and isolated rain showers with an outlook of instrument

meteorological condition ceilings.

AIRMETs (airmen's meteorological information) for the accident period revealed that the accident site was located within an area covered by an advisory for mountain obscuration and near the border of an active AIRMET for IFR conditions.

A terminal area forecast (TAF) that was issued on the morning of the accident for STS indicated deteriorating weather up until the time of the accident; however, the forecast was not for IFR conditions. At the time of the pilot's departure, the TAF reported marginal VFR to IFR conditions for the hours that followed the pilot's estimated arrival time.

Weather Briefing

The pilot retrieved weather information from the online service, ForeFlight.com, about 24 hours before he departed on the flight. According to Lockheed Martin Flight Services, the weather information provided to the pilot included TAFs, AIRMETs, area forecasts, METARs, and Notices to Airmen (NOTAMs). The area forecast report for Northern California, valid until the morning of the flight, indicated VFR conditions. The TAF for STS, valid to midnight, showed deteriorating conditions with low ceilings and low visibility.

The United States Naval Observatory reported the moon phase as a waning gibbous moon with 79% of the moon's visible disk illuminated. The moonset for Santa Rosa, California, was at 0948 and moonrise was at 2215.

Airport Information

Airport:	CHARLES M SCHULZ - SONOMA COUN STS	**Runway Surface Type:**	Asphalt
Airport Elevation:	128 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:	32	**IFR Approach:**	ILS
Runway Length/Width:	6000 ft / 150 ft	**VFR Approach/Landing:**	Straight-in

STS was located about 1.5 nm north-northwest of the accident site at an elevation of 129 ft. Runway 32/14 was 6,000 ft long and 150 ft wide. The airport was located within class D airspace and publicly owned and operated by the County of Sonoma. The airport was serviced by an operating control tower at the time of the accident.

The airport had several published NOTAMs at the time of the accident. One instrument NOTAM, which was valid at the time, stated "Instrument Approach Procedure ILS OR LOC/DME RWY 32, AMDT 19... DME REQUIRED EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, PYE VOR OUT OF SERVICE."

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	38.478889,-122.786392

The airplane impacted a grass field about 1.5 nm south of STS. All major components of the airplane were accounted for at the accident site. An initial impact point that spanned about 2 ft in length was identified by fragments from the left wing and the red position light. The main wreckage was located in the debris path about 133 ft from the initial impact point beyond an intermediate impact crater. Portions of the left wing, including two breached fuel tanks, were located about 40 ft south of the main wreckage. The empennage was inverted but remained intact with some airframe skin deformation to the vertical stabilizer, rudder and stabilator.

Airframe and Engine Examination

The main wreckage was comprised of the cockpit, right wing, a portion of the left wing, and engine. The rudder, aileron, and stabilator cables were traced from the cockpit to their respective control surfaces. The flap jackscrew displayed 17 threads, consistent with a 10° flap setting. The stabilator pitch trim jackscrew inner shaft top extension was about 0.35 inches, consistent with a neutral pitch setting.

Both the left main and auxiliary fuel tanks were breached and void of fuel. The right main tank remained intact; however, its fuel line was open. The right auxiliary tank contained about 8 gallons of liquid that had an odor and color consistent with 100 LL aviation grade gasoline. The fuel selector, which was positioned on the left main fuel tank, was subsequently rotated to each of the four fuel tank ports, and no obstructions were observed.

The main landing gear were attached to their respective wings, and the nose landing gear came to rest about 100 ft forward of the engine. The main landing gear control cables were impact damaged and extended about 8 inches from the outer cable shroud, consistent with a gear extended position.

A heading indicator and two attitude indicators were disassembled and examined at the accident site. The pendulous vane housings and vanes all exhibited light circumferential scoring. The vacuum pump functioned normally when manipulated by hand; both the vanes and carbon rotor were intact and unremarkable. The autopilot mode selector was found in the HDG position at the accident site.

The engine displayed a crack in the engine case between the No. 1 and No. 3 cylinder and around the No. 2 cylinder. All six cylinders remained attached to the engine crankcase. The fuel injection servo and air intake screen separated from the engine, and the left magneto and the oil filter were partially separated.

Rotational continuity was established throughout the engine and valve train when the engine crankshaft was manually rotated at the propeller. Thumb compression and suction were obtained on all six

cylinders. The cylinder combustion chambers and barrels were examined with a lighted borescope, and no evidence of foreign object ingestion or detonation was observed. The combustion chambers displayed color signatures consistent with normal operation. Examination of the rocker arms revealed no evidence of unusual wear.

An examination of the top and bottom spark plugs revealed signatures consistent with normal wear. The oil filter exhibited impact damage and partial separation. The oil sump pick up screen was removed and examined, but did not display any blockage. The engine driven fuel pump had partially separated, but suction and pressure were obtained when it was manipulated manually as water and mud were dispensed from the output port.

The fuel flow divider was disassembled and examined; about 1 tablespoon of residual fuel was observed in the divider housing. All six of the fuel nozzles were removed, and no obstructions were observed.

The fuel injection servo was separated and displayed impact damage at the throttle body near the throttle plate. An inspection of the fuel inlet screen did not show any blockage. The mixture control arm and throttle plate moved from stop to stop when actuated by hand.

With the exception of its mounting flange, the left magneto remained intact and produced spark on two of the six terminals. Disassembly of the unit revealed that the case was depressed onto the distributer gear which inhibited the full rotation of the magneto drive. The right magneto remained attached to the accessory case and produced spark on all six terminals when rotated by hand.

The propeller remained attached to the propeller hub, which was connected to the engine. One propeller blade exhibited "S" bending and was twisted opposite the direction of rotation with chordwise scratching on the forward face. The other propeller blade displayed chordwise scratching and was bent about 6 inches from the propeller opposite the direction of rotation.

Medical and Pathological Information

An autopsy was performed on the pilot by the Sonoma County Coroner, Santa Rosa, California. The autopsy report indicated the cause of death as "total body trauma."

A toxicological test on specimens recovered from the pilot was performed by the FAA Bioaeronautical Sciences Research Laboratory. A carboxyhemoglobin saturation test revealed no evidence of carbon monoxide in the pilot's cavity blood. The pilot's toxicology results were negative for ethanol, but positive for atenolol and chlorthalidone.

Atenolol, sometimes marketed under the brand name Tenormin, is a prescription beta blocker medication used alone or in combination with other medications to treat high blood pressure. Chlorthalidone, marketed under the names Hygroton and Thalitone, is a diuretic prescription medication used to treat high blood pressure and fluid retention caused by various conditions including heart disease. It may also be used to treat patients with diabetes insipidus and certain electrolyte disturbances and to prevent kidney stones in patients with high levels of calcium in their blood. The pilot had

reported both medications during previous airmen medical examinations. Atenolol is an FAA approved medication and chlorthalidone is not considered impairing.

Tests and Research

Engine Analyzer Data

A panel mounted JPI EDM-800 engine monitoring instrument was forwarded to the NTSB Recorder Laboratory for data recovery. Review of the recorded engine parameters retrieved from the on-board non-volatile memory revealed that the fuel flow, manifold pressure, and rpm increased at 1537, consistent with departure performance. The three parameters did not indicate any anomalies during the accident flight. In the airplane's final 20 seconds of flight, fuel flow increased from about 7 to about 14 gallons per hour, manifold pressure increased from about 10 to 19 inches of mercury, and rpm increased from about 2,100 to 2,480 rpm.

Additional Information

48-Hour History

The pilot contacted a friend in Palm Springs 2 days before the accident to inform him that he planned to fly to PSP for an overnight trip with his wife to retrieve some belongings. His friend picked up the pilot and his wife at the airport about 2015 on Wednesday, January 27, at which time he heard the pilot instruct the fixed based operator to fill each of the four fuel tanks on the accident airplane. According to the pilot's friend, they spent the night at his house that evening. The pilot's wife and the pilot awoke at 0700 and 0800, respectively and appeared rested. After they ran their errands and ate lunch, their friend took them to the airport where they departed on the accident flight. The pilot's friend offered his home to the pilot and his wife for another night, but the pilot was anxious to return home for work and to be present for his daughter who had recently broken her leg and was scheduled for surgery the following week. The friend further stated that they did not discuss weather with the exception of forecasted rainfall at the pilot's home airport.

ATC Communication

A review of the communications between the Oakland ARTCC controller and the pilot revealed that the controller did not issue current destination weather to the accident pilot as required by FAA Order JO 7110.65, which requires ATC personnel to transmit weather information to pilots when conditions are below a 1,000 foot ceiling or the highest circling minimum, whichever is higher, or less than 3 miles visibility for the corresponding airport. Additionally, the Oakland ARTCC controller had not been disseminating pilot reports (PIREPs). According to FAA Order JO 7110.65, controllers are required to

relay pertinent PIREP information to concerned aircraft in a timely manner.

The STS airport tower controller received a PIREP from a landing aircraft that arrived shortly before the accident airplane after completing an RNAV approach and reported the weather "right at minimums." The controller was required to enter the PIREP into the national airspace system as prescribed by FAA Order JO 7110.65; however, the controller did not do so, and he did not report any PIREPS to the accident airplane.

Administrative Information

Investigator In Charge (IIC):	Stein, Stephen
Additional Participating Persons:	Jon Prater; FEDERAL AVIATION ADMINISTRATION; Oakland, CA Michael McClure; Piper Aircraft Incorporated; McKinney, TX Troy Helgenson; Lycoming Engines; Denver, CO
Original Publish Date:	July 5, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92652