National Transportation Safety Board
Aviation Accident Final Report

Location:	Bee Caves, TX	**Accident Number:**	FTW04FA243
Date & Time:	09/23/2004, 1619 CDT	**Registration:**	N729DM
Aircraft:	Cessna 421C	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The 14,000-hour airline transport pilot was hired to fly the owner of the airplane and his mother on a cross country flight. Approximately 3 hours and 15 minutes into the flight, the pilot reported that he had a rough running engine and declared an emergency. A review of ATC voice communications revealed that the pilot had changed his mind several times during the emergency about diverting to a closer airport or continuing to the intended destination. Prior to his last communication, the pilot informed ATC that he, "was not gonna make it." The sole survivor of the accident reported that the flight was normal until they approached their destination. He said, "all of a sudden the engines did not sound right." The right engine sounded as if the power was going up and down and the left engine was sputtering. The airplane started to descended and the pilot made a forced landing in wooded area. The cockpit, fuselage, empennage, and the right wing were consumed by post-impact fire. A review of fueling records revealed that the pilot had filled the main tanks prior to the flight for a total of 213.4 gallons; of which 206 gallons were usable (103 gallons per side). During the impact sequence, the left wing separated at the wing root and did not sustain any fire damage. No fuel was found in the tank, and there was no discoloration of the vegetation along the left side of the wreckage path or around the area where the wing came to rest. The left fuel selector was found set to the LEFT MAIN tank, and the right fuel selector valve was set between the LEFT and RIGHT MAIN tanks. This configuration would have allowed fuel to be supplied from each tank to the right engine. A review of the airplane's Information Manual, Emergency Procedures-Engine Failure During Flight (speed above air minimum control speed) instructed the pilot to re-start the engine, which included placing both fuel selector handles to the MAIN tanks (Feel for Detent). If the engine did not start, the pilot was to secure the engine, which included closing the throttle and feathering the propeller. The propellers were not feathered. Examination of the airplane and engine revealed no mechanical deficiencies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper positioning of the fuel selector valves, which resulted in a loss of power to the left engine due to fuel exhaustion. After the power loss, the pilot failed to follow checklist procedures and did not secure (feather) the left propeller, which resulted in a loss of altitude and subsequent forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: DESCENT - NORMAL

Findings
1. (C) FLUID,FUEL - STARVATION
2. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
3. (F) PROPELLER FEATHERING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
4. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On September 23, 2004, approximately 1619 central daylight time, a Cessna 421C twin-engine airplane, N729DM, was destroyed when it impacted terrain following a loss of engine power to the left engine during descent near Bee Caves, Texas. The airline transport rated pilot and a passenger were fatally injured, and the other passenger was seriously injured. The airplane was registered to and operated by N729DM LLC of Ingram, Texas. An instrument flight rules (IFR) flight plan was filed for the cross-country flight that originated at the Angel Fire Airport (AXX) near Angel Fire, New Mexico, at 1304, and was destined for the Austin-Bergstrom International Airport (AUS) near Austin, Texas. Visual meteorological conditions prevailed for the personal flight conducted under 14 Code of Federal Regulations Part 91.

On September 23, 2004, the pilot, the owner of the airplane, and his assistant departed Texas, about 0930, and flew to Angel Fire, New Mexico. The purpose of the flight was to pick up the owner's mother, who spent her summers in Angel Fire, and then bring her back to her home in Austin, Texas. The owner's assistant was going to drive the owner's mother's car and personal belongings back to Austin. When they arrived in Angel Fire, the owner's mother met them at the airport and she had a picnic lunch prepared for them. The group had lunch, after which, the pilot excused himself and tended to the airplane. The pilot was reported to have purchased 94 gallons of 100 LL aviation fuel, which filled the main tanks of the airplane.

The pilot, the airplane owner, and his mother departed Angel Fire around 1200. The pilot was occupying the front left (pilot's) seat, the owner sat in the left rear seat, and his mother sat in the right rear seat. According to the owner, the flight was uneventful and they cruised at an altitude of 18,000-20,000 feet mean sea level (msl).

Prior to their arrival into Austin, the owner stated that all of a sudden, the engines did not sound right. He could not recall if it was just one engine, and believed it to be both engines. The right engine sounded as if the power was going up and down and the airplane was yawing. He added that the pilot had quickly applied full left aileron, and the control yoke was positioned with the right side of the yoke facing up towards the roof of the airplane. At one point, the owner thought the plane was going to stall. He said the pilot appeared busy in the cockpit, but not "harried". The owner could also hear the pilot talking to ATC. The owner added that the pilot never spoke directly to the passengers during the emergengy; however, the owner did hear the pilot say out loud, "Oh God, I don't think we're going to make it!" During this time, the airplane was descending and the owner noted that they were getting closer to the ground. He told his mother to tighten her seat belt and they held hands. Also during this time, the owner heard the left engine sputtering but could not recall if it ever quit. He did recall that the right engine "came back on line" (though he was not sure if it ever completely stopped producing power), and the airplane yawed. After the engine came back up to power, he recalled hearing the pilot tell ATC that they could make Austin. The owner stated that he remembered seeing the pilot move his right hand down toward the floor where the fuel selector handles were located, but could not recall seeing him turn the handles. He thought he might have been reaching for a chart. The owner also recalled (but wasn't completely sure) that the mixture controls were full rich; the propeller controls were at low rpm and the throttles were in the mid rpm position. He did not recall what any of the engine instruments indicated.

The owner further stated that he did not recalled the impact, but remembered the left side of

the airplane hitting tree limbs. When the airplane touched down, the impact broke his seat from the mounts and he was thrown to the right side of the airplane. He did not recall if he was unconscious, but woke up with the left side of his face pressed against a window and it was burning his face. The owner looked at his mother and she was lifeless, and there was no movement or sound from the pilot. Smoke started filling the cabin and he could see heat waves building. With the left side of his body broken, the owner lunged toward the aft cabin door and it opened. He fell down the stairs and dragged himself about 15-20 feet away from the burning airplane. When he exited the left side of the airplane, there was no fire on that side. The fire was burning the right side of the airplane.

The owner said there had been no previous mechanical problems with the airplane or engines.

A review of air traffic control (ATC) communications revealed that the pilot made initial contact with Austin Approach Control at 1608:09 and reported that he was descending from an altitude of 10,000 feet to 6,000 feet and he had the current airport information "Charles."

Between 1608:20 and 1612:29, the pilot communicated with ATC regarding instructions for an approach to runway 35R at AUS. During this time, the pilot complied with all ATC instructions, had descended to 4,000 feet, and was on a heading of 155 degrees.

At 1616:08, the pilot reported to ATC, "And delta mike, I'm having a rough running engine, I'd like to declare an emergency." ATC replied, "Okay nine delta mike, uh, roger, you also have Lakeway Airport just off to your right there if you want to." At 1616:15, the pilot responded, "No sir, I want to go in to Austin, just help me out."

At 1616:24, ATC instructed the pilot to turn 10 degrees to the left, maintain 3,000 feet, and report the airport in sight. ATC then asked the pilot for the number of souls on board and the amount of fuel remaining. At 1616:40, the pilot replied, "Okay, I've got three people on board and I've got plenty of fuel. I've got two hours of fuel left." ATC then instructed the pilot to report when the airport was in sight and informed him that he would be number one for a visual approach to runway 35L. The pilot acknowledged.

Four seconds later, the pilot reported to ATC, "may have to go to Lakeway," and ATC responded by informing him that it was four miles west of his position.

Approximately 30 seconds later, at 1617:44, ATC informed the pilot that Lakeway Airport had one runway that was aligned with 16/34 and was 4,000 feet long.

At 1617:50, the pilot contacted ATC and stated, "Sir, I'm gonna keep trying to come to Austin, my, ruh, engines cutting in and out." ATC acknowledged.

At 1617:58, the pilot stated, "no sir, I guess I have to go to Lakeway, give me a vector." ATC responded, "okay, turn right heading, uh, two eight zero," and the pilot acknowledged.

At 1618:20, ATC informed the pilot that the surface winds at Austin were from 040 degrees at 6 knots. At 1618:33, the pilot reported to ATC, "not gonna make it." ATC responded at 1618:36, "nine delta mike, the airport one o'clock and four miles." The pilot did not respond, and there were no further communications with him.

A review of radar data revealed the last radar return was received at 1618. At that time, the airplane was at an altitude of 1,100 feet mean sea level (msl), and on a northwesterly heading.

A witness, who was in his front yard, reported hearing a sputtering noise. He looked around and saw the airplane coming from the west. He reported that it appeared to be shaking and

oscillating vertically. The airplane then disappeared over the trees and the witness did not see or hear anything else.

A second witness, who was practicing football at a near-by middle school, stated that he observed the white, twin-engine airplane pass from his left to right in a fast, descending, right-hand turn. He noticed that one of the engines (he could not recall which) was sputtering, and he could see smoke coming from the back of that engine.

A third witness, who was walking around in a church parking lot, reported hearing a sputtering noise and saw the airplane circling at approximately 200-300 feet above ground level (agl) near a church construction site across the street from him. He reported that the plane went silent and then gradually descended until it disappeared behind the trees to the west of the construction site. Then, almost simultaneously, the witness heard the impact and explosion.

A fourth witness, who worked at an office near the site of the accident, heard a sputtering noise and saw the airplane directly above him. He reported that one of the engines was going "off and on" and the airplane was "losing altitude fast."

A fifth witness, who was working as a land steward at the nature conservancy where the airplane crashed, was in a pasture when he "heard the plane noise, loud and low, it was revving and uneven." The sound came from behind a cliff to the south of him. The witness then began to run toward the cliff, and the airplane "came into view about 100 feet up from the cliff and about 100-200 yards to the southeast" of the witness. He reported that "the plane wobbled a bit, then straightened, and it was flying in a really shallow, downward glide." He also reported that the engine was "revving and popping" before he lost sight of it. After the explosion, the witness saw a thick plume of smoke rising from the trees and a fire on the lawn.

The accident occurred during daylight hours approximately 30 degrees, 18 minutes north latitude, and 97 degrees, 53 minutes west longitude.

PILOT INFORMATION

The pilot held an airline transport pilot (ATP) certificate with a rating for airplane multi-engine land. The pilot also held a commercial certificate with ratings for airplane single-engine land, airplane single-engine sea, and rotorcraft-helicopter. The pilot, a retired airline pilot, was type-rated in a B-727, CE-500, L-1011, and MD-11.

His most recent Federal Aviation Administration (FAA) first class medical certificate was issued on December 9, 2003, during which time the pilot reported a total of 14,000 hours of civilian flight time. A logbook was located in the wreckage; however, according to his wife, this was a supplemental logbook. The pilot had recently started using this supplemental logbook and would later transfer the flight to his master logbook, which he kept at home. A review of the supplemental logbook revealed that he had accrued a total of approximately nine hours in make and model.

AIRCRAFT INFORMATION

A review of the aircraft maintenance logbooks revealed that the aircraft had undergone an annual inspection on September 7, 2004, in Waco, Texas, at an aircraft total time of 5,328.8 hours. The airplane had accrued approximately 12 hours since the inspection.

The airplane's fuel system consisted of two main tanks, two auxiliary wing locker tanks, two fuel selectors, and emergency cross feed shutoff valves. The main fuel tanks supplied their

respective engine with fuel for normal operations, including takeoffs and landings.

The left auxiliary tank was intact, but was not used during the flight. The fuel quantity sending unit was disconnected, and approximately one cup of blue aviation fuel was found in the tank. The right auxiliary fuel tank was destroyed by fire.

Two fuel selectors, one for each engine, were located on the floor between the pilot and co-pilot seats. The selectors allowed selection of main fuel, cross feed, and off. According to the airplane's Operation Manual, it stated that during normal flight operations, the pilot was to position the left fuel selector to LEFT MAIN and the right fuel selector to RIGHT MAIN. With the selectors set to these positions, fuel would flow from each main tank, through the fuel selector, to the respective engine driven fuel pump. Additionally, fuel could also be cross-fed from the left main tank to the right engine and vice versa. If the pilot elected to cross-feed the fuel, then both engines would be supplied with fuel from the right main tank when both fuel selectors are positioned to the RIGHT MAIN tank. Conversely, both engines would be supplied with fuel from the left main tank when both fuel selectors were positioned to LEFT MAIN tank. The cross-feed function is used to balance asymmetric fuel loads and to supply the engine-driven fuel pump from the opposite main tank.

WRECKAGE INFORMATION

The wreckage was examined at the accident site on September 24-25, 2004. All major components of the airplane were accounted for at the scene. The airplane impacted wooded terrain and came to rest upright at an elevation of approximately 780 feet mean sea level (msl) on a magnetic heading of 260 degrees, at an elevation of approximately 780 feet msl.

The point of initial impact appeared to be along a line of several trees that ran parallel to the wreckage path. The tops of the tree limbs were severed and impact marks were evident at points progressively closer to the ground along the wreckage path prior to the airplane's first contact with the ground. The first ground impact mark was noted approximately 50 feet beyond initial impact with the trees, and the main wreckage came to rest approximately 50 feet beyond the first ground impact mark.

The main wreckage included the cockpit, fuselage, empennage, tail section, inboard section of the right wing and the right engine. The cockpit, fuselage, empennage, and inboard section of the right wing were consumed by post-impact fire. The right engine sustained fire and impact damage. The propeller remained attached to the engine.

Scattered along the wreckage path were the left wing and engine. The engine had separated from the nacelle and was found forward of the left wing and was embedded in trees. The propeller remained attached to the engine. Both the wing and the engine sustained impact damage and were not damaged by fire. The left wing came to rest adjacent to a large cedar tree that exhibited an impact mark near the base of the trunk. Examination of the wing revealed that the flap and aileron sustained impact damage, but remained attached to the wing. The fuel tank was breached, and there was no evidence of fuel in the tank. There was also no evidence of a fuel spill and vegetation around the wing was not discolored. The wing locker fuel tank was intact, and approximately one cup of fuel was observed in the tank. The fuel strainer was intact and disassembled. Approximately one cup of light blue colored fuel was drained from the bowl, and the filter was absent of debris.

Also found along the wreckage path was the outboard section of the right wing, which was located at the base of a small tree. This section of wing was consumed by fire. The fuel strainer

was intact and the bowl was empty. The filter was absent of debris.

The left wing fuel selector handle located in the cockpit was found set to the left tank, and the right wing fuel selector was found positioned in-between the left and right fuel tank. The left wing fuel selector valve located in the wing was found in the "off" position, and the right wing fuel selector valve was set "in-between" the left and right fuel tanks. This configuration would have allowed fuel to be supplied from each tank to the right engine.

The engines were examined at Teledyne Continental Motors (TCM), Mobile, Alabama, on November 30- December 3, 2004, under the supervision of the Safety Board.

Examination of the left engine revealed that the propeller shaft was bent and bulged. This damage precluded the opportunity to test run the engine and a subsequent examination and teardown were initiated. The propeller flange was manually rotated and continuity to the rear accessories was established. Valve train continuity was also established. A compression check was conducted via a compression gauge and compression was established on each cylinder. Both magnetos were removed and placed on a test bench. Spark was noted on each ignition lead at various power settings. Engine timing was found to be within limits. The top and bottom spark plugs were removed and appeared to be light gray in color.

The fuel pump housing for the inlet fitting had fractured during the accident sequence. The fractured surfaces were reattached with epoxy and the pump was placed on a test bench. During the test, a small leak was noted coming from the seal drain and the pump flowed about 50 pounds per hour, higher than normal test tolerances. The coupling was intact.

The fuel manifold valve was also placed on a bench test and tested within tolerances.

The fuel control unit was bench-tested and there were no restrictions to the unit's ability to function. The fuel control screen was found to be free of debris.

Some engine oil was found in the oil pan. It appeared to be light in color and some small wood particles were mixed in with the oil. The oil sump screen was absent of debris.

All other engine components and accessories were normal and no anomalies were noted.

Examination of the right engine revealed impact and fire damage. The turbocharger sustained impact and extensive fire damage and the turbine wheel would not rotate. Engine and valve train continuity was established by manual rotation of the propeller flange, except the # 2 cylinder intake valve was being held open because the rocker arm was frozen on the shaft. The push rod tube was not bent and there was no damage to the piston. Both magnetos remained attached to the accessory section, but their respective leads were destroyed by fire. Due to fire damage, the magnetos could not be tested. The top and bottom spark plugs were removed and appeared gray in color.

The fuel control unit exhibited fire and impact damage. The fuel finger screen was absent of debris.

The fuel pump remained attached to the engine, but the rear most portion of the pump had melted away. The coupling was intact.

The fuel manifold valve was exposed to heat and could not be bench tested. The unit was disassembled and the diaphragm was melted to the interior area of the valve. The fuel screen was absent of debris.

The oil sump exhibited impact and fire damage. The screen was absent of debris.

All other engine components and accessories were normal and no anomalies were noted.

An examination of both 3-bladed propeller systems was conducted on November 17, 2004, at McCauley Propeller Systems, Wichita, Kansas, under the supervision of the Safety Board.

Examination of the left propeller system revealed it was operating at a low pitch/low power setting or wind milling at the time of impact. Additionally, the spinner shell exhibited propeller counterweight impressions, which also indicated a low pitch blade angle at the time of impact. Blade bending, twisting, and overall propeller damage was minimal.

Examination of the right propeller system revealed it was operating at a slightly higher power setting and slightly higher pitch than the left propeller. Additionally, the right propeller piston rod projected out of the rear of the hub and impact damage along the rod length was similar to that of the left propeller, indicating a similar blade angle at impact. Blade bending, smooth decrease pitch twisting, and overall propeller damage for the right propeller indicated that the propeller was operating with higher power at the time of impact.

The feather-stop mechanisms for each propeller were undamaged, which indicated that the mechanisms were not engaged at the time of impact.

METEOROLOGICAL INFORMATION

At 1353, the automated weather observing system at the Austin-Bergstrom International Airport (AUS), located approximately 13 nautical miles east from the site of the accident, reported wind from 010 degrees at 7 knots, scattered clouds at 6,000 feet, scattered clouds at 20,000 feet, temperature 29 degrees Fahrenheit, dew point 19 degrees Fahrenheit, and a barometric pressure setting of 29.97 inches of Mercury.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was conducted by the Travis County Medical Examiner, Austin, Texas.

The FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma, performed toxicological testing.

ADDITIONAL INFORMATION

A review of the airplane's Information Manual, page 3-20, Emergency Procedures-Engine Failure During Flight (speed above air minimum control speed) stated:

1. Inoperative Engine- Determine. Idle engine same side as idle foot.

2. Operative Engine- ADJUST as required.

3. Fuel Flow-CHECK. IF deficient, position auxiliary fuel pump switch to ON.

4. Fuel Selectors- MAIN TANKS (Feel for Detent).

5. Fuel Quantity- CHECK. Switch to opposite MAIN TANK if necessary.

6. Oil Pressure and Oil Temperature-CHECK. Shutdown engine if oil pressure is low.

7. Magneto Switches- CHECK ON.

8. Mixture- ADJUST. Lean until manifold pressure begins to increase, then enrichen as power increases.

If engine does not start, secure as follows:

9. Inoperative Engine-Secure

    a. Throttle-CLOSE

    b. Propeller-FEATHER

    c. Mixture-IDLE CUT-OFF

    d. Fuel Selector-OFF (feel for detent)

    e. Auxiliary Fuel Pump-OFF

    f. Magneto Switches-OFF

    g. Propeller Synchrophaser-Off (optional system)

    h. Alternator Switch-OFF

10. Operative Engine-Adjust

    a. Power-AS REQUIRED

    b. Mixture-Adjust for Power

    c. Fuel Selector-Main tank (feel for detent)

    d. Auxiliary Fuel Pump-On

11. Trim Tabs- ADJUST 5 degrees bank toward the operative engine with approximately 1/2 ball slip indicated on the turn-and-bank indicator.

12. Electrical Load- DECREASE to minimum required.

13. As Soon as Pratical-LAND.

NOTE: Schedule fuel use such that an adequate amount of fuel is available in the operative engine main tank for landing. Cross feed as required to maintain lateral balance within 120 pounds per side. When cross feeding, maintain level flight, maintain altitude greater than 1,000 feet AGL and position inoperative engine auxiliary pump to LOW.

According to the airplane manufacturer, due to the fact that the left fuel selector was postioned to the LEFT MAIN tank and the right fuel selector was found positioned between the LEFT and RIGHT MAIN fuel tanks, fuel would have been supplied to the right engine from both tanks.

The airplane was released to a representative of the owner's insurance company.

Pilot Information

Certificate:	Airline Transport	**Age:**	62, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Seatbelt
Instrument Rating(s):	Airplane; Helicopter	**Second Pilot Present:**	No
Instructor Rating(s):		**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	12/09/2003
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	14000 hours (Total, all aircraft), 9 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N729DM
Model/Series:	421C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	421C1101
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	09/07/2004, Annual	**Certified Max Gross Wt.:**	7560 lbs
Time Since Last Inspection:	12 Hours	**Engines:**	2 Reciprocating
Airframe Total Time:	5328.8 Hours as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed	**Engine Model/Series:**	GTSIO-520
Registered Owner:	N729DM LLC	**Rated Power:**	375 hp
Operator:	N729DM LLC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	AUS, 542 ft msl	**Distance from Accident Site:**	13 Nautical Miles
Observation Time:	1553 CDT	**Direction from Accident Site:**	100°
Lowest Cloud Condition:	Scattered / 6000 ft agl	**Visibility**	10 Miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	10°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.97 inches Hg	**Temperature/Dew Point:**	33°C / 19°C
Precipitation and Obscuration:			
Departure Point:	Angel Fire, NM (AXX)	**Type of Flight Plan Filed:**	IFR
Destination:	Austin, TX (AUS)	**Type of Clearance:**	IFR
Departure Time:	1204 MDT	**Type of Airspace:**	Class C

Airport Information

Airport:	Lakeway (3R9)	**Runway Surface Type:**	Grass/turf
Airport Elevation:	909 ft	**Runway Surface Condition:**	Vegetation
Runway Used:	NA	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal, 1 Serious	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	On-Ground
Total Injuries:	2 Fatal, 1 Serious	**Latitude, Longitude:**	30.307222, -97.895000

Administrative Information

Investigator In Charge (IIC):	Leah D Yeager	**Report Date:**	07/07/2005
Additional Participating Persons:	Carlos F Gallardo; San Antonio Flight Standards District Office; San Antonio, TX Steven Miller; Cessna Aircraft Company; Wichita, KS John Kent; Teledyne Continental Motors; Seagoville, TX Tom Knopp; McCauley; Vandalia, OH		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		