
		NTSB ID: LAX06FA106B		Aircraft Registration Number: N759KE	
		Occurrence Date: 02/08/2006		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place El Cajon	State CA	Zip Code 92020	Local Time 1642	Time Zone PST	
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 182Q		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
1.1 History of the Flight					
<p>On February 8, 2006, at 1642 Pacific standard time, a Cessna 172RG, N9531B, and a Cessna 182Q, N759KE, collided in flight approximately 3 miles south of the Gillespie Field Airport in El Cajon, California. Both airplanes were destroyed in the collision sequence and post impact fires. The two occupants of the Cessna 172RG and the sole occupant of the Cessna 182Q were fatally injured. The collision occurred over a densely populated residential area and multiple homes sustained damage from the falling debris; there were no reported ground injuries. Both airplanes were operated under 14 CFR Part 91, the Cessna 172RG by Scandinavian Flight Academy, Inc. as an instructional flight and the Cessna 182Q, by a private pilot, as a personal flight. The Cessna 172RG was registered to the operator and the Cessna 182Q was registered to a private company. The Cessna 172RG departed from Gillespie Field, at 1637 on an instrument flight rules (IFR) clearance and was destined for Brown Field Municipal Airport, San Diego, California, located 15 miles south of Gillespie Field. The Cessna 182Q departed from Gillespie Field at 1638 on a local visual flight rules flight (VFR) to the Brown Field Municipal Airport. Visual meteorological conditions prevailed, and included high broken cloud cover with visibility of 25 miles.</p>					
1.1.1 Air Traffic Control History					
<p>The Cessna 172RG contacted Gillespie Field ground control (also working clearance delivery) at 1620:08, initially requesting a tower en route IFR clearance to McClellan-Palomar Airport, Carlsbad, California, located 24 nautical miles northwest of Gillespie Field. At 1620:31, a different voice changed the destination airport to Brown Field. The controller issued a clearance to depart via the published Gillespie Field departure procedure to Mission Bay (MZB) which was as follows: maintain 3,000 feet, expect 4,000 feet 10 minutes after departure. The pilot was given a discrete transponder code of 5276. The pilot read back the clearance correctly.</p>					
<p>The Cessna 172RG requested taxi clearance at 1622 and was instructed to taxi to runway 27R. The Cessna 182Q had been engaged in VFR pattern work at Gillespie Field, executing several full stop landings and taxiing back for departure after each one. At 1633:45, the Cessna 182Q reported ready for departure at runway 27R. At 1635:52, the local controller instructed the Cessna 172RG to stand by for IFR release, and then cleared the flight for takeoff at 1637:12. The Cessna 182Q was cleared for takeoff at 1638:31.</p>					
<p>The Cessna 172RG departed to the west and then executed a right 270-degree turn in accordance with the published instrument departure procedure, crossing overhead runways 27L and 27R southbound climbing through about 1,400 feet. The pilot was instructed to contact SCT at 1638:48.</p>					
<p>The Cessna 182Q departed runway 27R at 1638:31, proceeded straight out to state highway 125 and then turned southbound. At 1640:38, the pilot requested and received permission to go off</p>					
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frequency. At that time, the Cessna 182Q was about 1.6 nm west of the Cessna 172RG, climbing through 1,700 feet.

There was no further Gillespie Field ATCT contact with either aircraft.

The Cessna 172RG contacted the SCT East Radar sector at 1639:41, climbing through 1,300 feet to 3,000 feet. The controller acknowledged. At 1640:24, the radar controller radar identified the Cessna 172RG one half mile south of Gillespie Field, instructing the pilot to maintain 2,600 feet and fly a heading of 200 degrees and expect vectors to the POGGI 336 radial. The pilot read back the wrong radial, and the controller corrected him. At 1640:54, the controller read the Brown Field weather to the pilot and told the pilot to expect the VOR-A approach. An aural alarm consistent with a conflict alert warning was audible in the background of this ATC transmission and no action was taken by ATC.

Between 1641:08 and 1641:31, the Cessna 172RG pilot and controller discussed the pilot's intentions following completion of the VOR-A approach. At 1641:34, the controller instructed the Cessna 172RG to fly heading 190. The pilot read back "One nine" At 1641:43, the controller repeats the heading instruction. At 1641:46, static is heard on the frequency. The controller called the Cessna 172RG at 1641:49 and at 1641:59 with no response. At 1642:12, a pilot of Eagle Flight 87 reported, "two uh targets just ahead of us uh down a couple thousand they were just two fireballs and uh both look like they hit the ground." The controller acknowledged, and at 1642:24 another pilot confirmed the report.

1.1.2 Radar Information

Recorded radar data was obtained from the Southern California Terminal Radar Approach Control (SCT) facility using data from the airport surveillance radar (ASR-9) located near Miramar, California. The radar data was analyzed for time frame and proximity to the anticipated flight tracks of the airplanes en route from Gillespie. Based on the information, two radar tracks were located that were consistent with the respective paths of flight.

The Cessna 172RG was directly overhead the airport at 1639:55 at an elevation of 1,300 feet mean sea level (msl) and its path of travel was generally southbound. At 1640:51, the Cessna 172RG was climbing through 1,900 feet msl and the flight path changed to a south-southwest direction while it was overhead of Interstate 8.

At 1640:00, the Cessna 182 was west-southwest bound at an elevation of 1,200 feet msl. The Cessna 182 climbed through 1,900 feet at 1640:51 and was established in a south-southeast direction of flight after transitioning from the upwind leg.

The respective airplanes' courses continued in the aforementioned directions with the Cessna 172RG slightly ahead and higher than the Cessna 182, until the collision, at approximately 1642 and at an elevation of 2,300 feet msl.

1.1.3 Witness Information

A witness, who was a professional airline pilot, observed the accident while located at a private residence in the Mount Helix area. He noted two airplanes flying approximately 1,800 feet mean sea level (msl), with one flying southwest bound and the other moving eastward. They were both high-wing airplanes and one appeared to be larger than the other, with a size differentiation similar to a Cessna 152 in comparison to a Cessna 172. The airplanes appeared to be in the Gillespie Field class D airspace when the eastbound airplane impacted the right side of the southwest bound airplane. Upon impact, there was an instant ball of fire and the wings separated from the fuselages of the airplanes as they descended to the ground.

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Another witness was driving her car westbound, approaching Interstate 8 (I-8). She looked upward to the sky and noticed an airplane following I-8 in an eastward direction. She subsequently observed another airplane flying westbound, which appeared at a slightly lower altitude. If the airplanes continued on their present paths, it appeared that their respective paths would intersect. The airplanes did not appear to be in distress. As she continued to watch the airplanes, the airplane flying east impacted the airplane flying west at its approximate 3-o'clock position. The eastbound airplane appeared to impact the westbound airplane on the right side from its front to middle section. The witness did not see an immediate fire but soon after the collision, pieces fell from the airplanes in an arc-like pattern.

1.2 Other Damage

Debris was scattered from the airplanes across a 6-block area consisting of a residential neighborhood and a park. As the right wing of the Cessna 182Q landed in front of a residence, fuel sprayed from the fuel bladder onto the front of the residence, which subsequently sustained considerable fire damage. The left wing of the Cessna 172RG landed on a residence, penetrating the structure; the right wing landed in a parking lot and a parked vehicle sustained fire damage.

1.3 Personnel Information

1.3.1 Cessna 172RG Pilots' Information

1.3.1.1 Certified Flight Instructor

The certified flight instructor (CFI) was authorized to teach single and multi-engine airplanes and provide instrument instruction. The CFI obtained his certificate in August 2005, on his first attempt. No personal flight logbooks were recovered for the CFI, and according to the operator, were most likely onboard the airplane during the accident. On his last application for a first-class Federal Aviation Administration (FAA) medical certificate, dated September 10, 2004, the CFI reported 212.4 hours of total pilot time. The operator reported that the CFI had 570 hours of flight time when the accident occurred, accruing 27 hours in the last 30 days. The operator indicated that the CFI was seated in the right front seat of the airplane at the time of the accident and was providing instrument instruction.

1.3.1.2 Pilot Undergoing Instruction

The pilot undergoing instruction (PUI) did not hold any FAA airman certificates. He was issued a first-class FAA medical certificate on November 29, 2005, with a limitation that he must wear corrective lenses. On the application, the PUI reported 305 hours of total pilot time with no hours accumulated in the past 6 months.

The PUI held a commercial pilot certificate issued by the Joint Aviation Authorities (JAR or JAA). He was attending Scandinavian Flight Academy to obtain FAA-issued commercial and CFI certificates for single and multi-engine airplanes and instrument instruction. He began at the academy on January 5, 2006, and had flown 15 flights and attended 1 simulator session prior to the accident. The PUI also attended the academy in 2004, for multi-engine time building at which time he flew 35 hours over a period of 3 months. The PUI was seated in the Cessna 172RG left seat and is presumed by the operator to have been wearing a view-limiting device (for training purposes) at the time of the collision.

According to 14 CFR Part 91.109 (b), no person may operate an aircraft in simulated instrument flight unless the other control seat is occupied by a safety pilot who possesses at least a private pilot certificate with category and class ratings appropriate to the aircraft being flown. In addition, the safety pilot must have adequate vision forward and to each side of the aircraft, or a

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competent observer in the aircraft adequately supplements the vision of the safety pilot.

1.4.2 Cessna 182Q Pilot Information

The Cessna 182Q pilot held a private pilot certificate and was undergoing instruction to obtain his instrument rating. The accident flight was not instructional. The pilot's third-class FAA medical certificate was issued on August 25, 2005. A personal flight logbook for the pilot showed that he had amassed a total of 321 flight hours. The last entry in the logbook was February 6, 2006. According to a family member of the pilot, the pilot flew the airplane from the left seat.

1.4 Airplane Information

1.4.1 Cessna 172RG

The Cessna 172RG was manufactured in 1981. The airplane was equipped with a Lycoming engine, model O-360-F1A6, and a controllable pitch McCauley propeller, model B2D34C220-B. According to the logbooks, the last maintenance performed on the airplane was a 100-hour inspection completed on December 16, 2005. The last annual inspection was completed on February 15, 2005. According to the operator, the airplane departed with 45 gallons of fuel onboard. It was not equipped with a traffic avoidance system.

1.4.2 Cessna 182Q

The Cessna 182Q was manufactured in 1977. The airplane was powered by a Teledyne Continental engine, model O-470-U, and a controllable pitch McCauley propeller, model 2A34C204. The airplane was fueled at Crownair Aviation prior to departure from Montgomery Field; 19.5 gallons were added to the airplane.

The airplane's avionics included a Garmin GTX 330 and Apollo MX 20. The Garmin GTX 330 relays information to the Apollo MX 20 and in part, is used to provide traffic information service (TIS) to the pilot during flight through mode S data link. Due to the damage sustained to the units, no functional testing was performed. According to a family member of the pilot, the unit had undergone recent maintenance and he was not sure if the unit had been set to provide TIS.

1.5 Meteorological Information

The closest official aviation weather information was an unedited surface weather observation for Gillespie Field. At 1647, 5 minutes following the accident, the weather was reported as: ceiling, 20,000 feet broken; visibility, 25 statute miles; wind from 260 degrees at 8 knots; temperature, 73 degrees Fahrenheit; dew point, not reported; and altimeter, 29.93 inches of mercury.

1.6 Communications

At the time of the accident, the Cessna 172RG was in radio contact with the Southern California Terminal Radar Approach Control facility and as noted earlier, was assigned a discrete transponder code of 5276. The Cessna 182Q had switched off frequency from the Gillespie Air Traffic Control Tower at 1640:48 and was assigned a visual flight rules transponder code of 1200.

1.7 Wreckage and Impact Information

The airplanes collided in flight over a densely populated area of El Cajon and debris showered into neighborhoods and into Harry Griffen Park, located in the city of La Mesa, California. The distance between the impact point of the main wreckage of the Cessna 172RG and the Cessna 182Q was about 810 feet.

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1.7.1 Cessna 172RG

The blue on white Cessna 172RG impacted flat terrain in Harry Griffen Park. With the exception of the wings of the airplane, the majority of the wreckage was confined to the impact area. Various small pieces of debris were located throughout the neighborhood sections of the overall accident site. The engine and propeller remained attached to the forward fuselage section. The structure was thermally consumed in a post-impact fire. The right wing of the Cessna 172RG was located about 620 feet north of the main wreckage in a parking lot for Harry Griffen Park. Fire damage was evident on the wing and a liquid had seeped from the wing and left a mark on the pavement of the parking lot. The left wing came to rest approximately 935 feet north-northeast of the main wreckage on a residence that bordered Harry Griffen Park. The wings came to rest approximately 430 feet from each other.

1.7.2 Cessna 182Q

The red on white Cessna 182Q crashed into a mulberry tree in the backyard of a residence and was covered with branches. The main wreckage contained evidence of fire; however, the fire was extinguished by the neighboring resident following the airplane's ground impact. The propeller remained attached to the engine crankshaft and propeller blades did not display gouging or twisting. The upper 3/4 of the vertical stabilizer and rudder were separated and later located in the yards of two separate residences. The top portion of the vertical stabilizer was 1,345 feet north-northeast of the main wreckage. The top portion of the rudder was 1,185 feet from the main wreckage. The right wing was located 1,000 feet north-northeast of the main wreckage in the front yard of a residence. The residence and wing sustained fire damage. The left wing was located in a tree-covered area of the park approximately 775 feet northwest of the main wreckage and near the locations of the Cessna 172RG wings. Investigators located the Cessna 182Q left wing aileron between the left wing of the Cessna 182Q and the left wing of the Cessna 172RG.

Investigators examined all structures and debris of the airplanes for impact marks and paint transfers. Several marks were evident on the Cessna 182Q left wing. A blue mark, consistent with the color of the 172RG, on the outboard, underside of the left wing was measured to be at a 40-degree angle to the longitudinal axis of the airplane, from the leading edge-outboard, the mark extended to the trailing edge-inboard. The separated left aileron contained a similar blue mark that was perpendicular to the longitudinal axis of the airplane.

Investigators examined the separated sections of the Cessna 182Q's vertical stabilizer and rudder and noted blue marks. A blue mark, measured at 65 degrees to the vertical axis of the airplane, was located near the top of the vertical stabilizer on the right side, that extended upward to the trailing edge. On the left side trailing edge of the rudder, investigators measured a blue mark 40 degrees to the vertical axis, that extended upward as it moved outward to the trailing edge.

1.8 Medical and Pathological Information

The San Diego County Medical Examiner completed autopsies on the pilots. The FAA Civil Bioaeronautical Research Laboratory completed toxicological testing on specimens of the pilots. All of the tests were negative for volatiles and tested drugs.

1.9 Airport Information

Gillespie Field is home to about 740 aircraft, made up of single-engine airplanes, multi-engine airplanes, jets, helicopters, and gliders. It is contained within Class D airspace that extends from the surface to 2,400 feet msl. The Class D airspace surrounds the airport and encompasses the location where the collision occurred.

For 2005, the average number of flight operations per day was about 670. Local traffic made up 60

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percent of the aircraft operations; about 40 percent of the airport operations were from itinerant general aviation aircraft. IFR traffic accounted for 4.4 percent of the operations. In addition, Gillespie Field averaged an additional 13 over flights (transitional flights) per day.

1.10 Tests and Research

1.10.1 Performance Information

The ground speeds and tracks were calculated using radar data. The ground speed of the Cessna 172RG was calculated at 90 knots, with a ground track of 150 degrees. The ground speed of the Cessna 182Q was calculated at 120 knots with a ground track of 190 degrees. Using the winds aloft for 2,572 feet, the calculated true headings of the Cessna 182Q and 172RG were 147 degrees and 189 degrees, respectively.

1.10.2 Air Traffic Control Study

The ATC group convened at Southern California Terminal Radar Approach Control (SCT) on February 10, 2006. In addition to the NTSB Air Traffic Control Group Chairman, representatives from the FAA and the National Air Traffic Controllers Association, a party to the investigation, were present. The group reviewed recorded radio and radar data, procedural documentation, training materials, and other information related to the accident. On February 11, three of the four controllers on duty in the cab at Gillespie Airport Traffic Control Tower (SEE ATCT) were interviewed. On February 13, the group interviewed the San Diego area operational supervisor, two controllers assigned to the East Radar sector, South Bay radar controller, and a fourth Gillespie controller who was in the tower when the collision occurred.

1.10.2.1 Radar and Conflict Alert (CA) Data

The SCT Automated Radar Terminal System (ARTS IIIE) is equipped with conflict detection software that is intended to alert controllers when an aircraft is, or is predicted to be, in unsafe proximity to other aircraft. The system detected a conflict between the Cessna 172RG and the Cessna 182Q at 1640:51, sounding aural alarms at both the East Radar position and the South Bay radar position and placing flashing red warnings next to both aircraft targets on the sector radar displays. The aural alarm sounded for two five-second periods starting at 1640:55 and 1641:05, and the flashing warnings occurred from approximately 1640:55 until the collision occurred.

The radar data shown on the Gillespie Field ATCT radar display is supplied by the SCT ARTS IIIE system. Examination of SCT adaptation data showed that Gillespie Field tower would not receive aural conflict alert warnings on departing traffic because of SCT configuration settings affecting the Gillespie Field tower radar display. The STC configuration settings were changed immediately following the accident.

1.11 Additional Information

1.11.1 Cessna Visibility Chart

Cessna Aircraft Corporation created a visibility chart for various Cessna models, including the 172 and 182. The pilot view angles were based on a pilot of average size at the time of its creation (85 percentile man), 160 pounds and 71 inches, seated in the left seat of the airplane.

The view angle for a pilot sitting in the left seat of a Cessna 172 was 85 degrees on the right side, 3 degrees upward and 22 degrees downward. The view angle for a pilot sitting in the left seat of a Cessna 182 was 55 degrees on the left side, with 3 degrees upward and 45 degrees downward. The forward visibility angle was 76 degrees on the right and 55 degrees on the left.

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1.11.2 Air Traffic Control Procedures

FAA Order 7110.65, paragraph 2-1-6, "Safety Alert," requires controllers to be vigilant for situations where aircraft may come within hazardous proximity. This paragraph states, in part:

2-1-6. SAFETY ALERT

Issue a safety alert to an aircraft if you are aware the aircraft is in a position/altitude which, in your judgment, places it in unsafe proximity to terrain, obstructions, or other aircraft. Once the pilot informs you action is being taken to resolve the situation, you may discontinue the issuance of further alerts. Do not assume that because someone else has responsibility for the aircraft that the unsafe situation has been observed and the safety alert issued; inform the appropriate controller.

NOTE-

1. The issuance of a safety alert is a first priority (see para 2-1-2, Duty Priority) once the controller observes and recognizes a situation of unsafe aircraft proximity to terrain, obstacles, or other aircraft. Conditions, such as workload, traffic volume, the quality/limitations of the radar system, and the available lead time to react are factors in determining whether it is reasonable for the controller to observe and recognize such situations. While a controller cannot see immediately the development of every situation where a safety alert must be issued, the controller must remain vigilant for such situations and issue a safety alert when the situation is recognized.

2. Recognition of situations of unsafe proximity may result from MSAW [minimum safe altitude warning]/E-MSAW [en route minimum safe altitude warning]/LAAS [inhibiting low altitude alert system], automatic altitude readouts, Conflict/Mode C Intruder Alert, observations on a PAR [precision approach radar] scope, or pilot reports.

3. Once the alert is issued, it is solely the pilot's prerogative to determine what course of action, if any, will be taken.

a. Omitted

b. Aircraft Conflict/Mode C Intruder Alert. Immediately issue/initiate an alert to an aircraft if you are aware of another aircraft at an altitude which you believe places them in unsafe proximity. If feasible, offer the pilot an alternate course of action.

c. When an alternate course of action is given, end the transmission with the word "immediately."

PHRASEOLOGY-

TRAFFIC ALERT (call sign) (position of aircraft) ADVISE YOU TURN LEFT/RIGHT (heading), and/or CLIMB/DESCENT (specific altitude if appropriate) IMMEDIATELY

Further instructions regarding conflict alerts are contained in FAA Order 7110.65, paragraph 5-14-1, which states, in part:

5-14-1 CONFLICT ALERT (CA) and MODE C INTRUDER (MCI) ALERT

a. When a CA or MCI alert is displayed, evaluate the reason for the alert without delay and take appropriate action.

NOTE-

DARC does not have CA/MCI alert capability.

REFERENCE-

FAAO 7110.65, Safety Alert, Para 2-1-6

1.11.3 Advisory Circular (AC) 90-48C Pilots' Role in Collision Avoidance

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According to AC 90-48C, "the flight rules prescribed in Part 91 of the Federal Aviation Regulations (FARs) set forth the concept of "See and Avoid." This concept requires that vigilance shall be maintained at all times, by each person operating an aircraft, regardless of whether the operation is conducted under Instrument Flight Rules (IFR) or Visual Flight Rules (VFR).

"Pilots should also keep in mind their responsibility for continuously maintaining a vigilant lookout regardless of the type of aircraft being flown. Remember that most MAC [mid-air collision] accidents and reported NMAC [near mid-air collisions] occur during good VFR weather conditions and during the hours of daylight."

The AC further states, "pilots should remain constantly alert to all traffic movement within their field of vision as well as periodically scan the entire visual field outside of their aircraft to ensure detection of conflicting traffic. The probability of spotting a potential collision threat increases with the time spent looking outside, but certain techniques may be used to increase the effectiveness of the scan time. The human eyes tend to focus somewhere, even in a featureless sky.

In order to be most effective, the pilot should shift glances and refocus at intervals. Pilots should also realize that their eyes may require several seconds to refocus when switching views between items in the cockpit and distance objects. Peripheral vision can be most useful in spotting collision threats from other aircraft. Pilots are reminded of the requirements to move one's head in order to search around the physical obstructions, such as door and window posts."

In addition, "during climbs and descents in flight conditions which permit visual detection of other traffic, execute gentle banks left and right at a frequency which permits continuous visual scanning of the airspace."

1.11.4 Australian Transport Safety Bureau Research Report


In April of 1991, the Australian Transport Safety Bureau released a research report focused on the limitations of the see-and-avoid principle. The researchers concluded that the see-and-avoid concept is far from reliable. Noted limitations found were the limitations of the visual system, the demands of cockpit tasks, and various physical and environmental conditions that combine to decrease the effectiveness of see-and-avoid concepts. Furthermore, the research study noted that cockpit environments severely limit the available cockpit views through doorpost positioning, windscreen crazing, and dirt acting as focal traps. The research study also stated that even when approaching aircraft are sighted, there is no guarantee that an evasive action will be successful. It concluded that the see-and-avoid concept should not play a significant role in future air traffic systems.


1.11.5 Sun Data

According to the U.S. Naval Observatory Astronomical Applications Department, sun transit began at 1202 and sunset was at 1727.

1.11.6 Wreckage Release

The Cessna 172RG was released to the owner's representative on March 10, 2006. No parts or pieces were retained. The Cessna 182Q was released to the owner's representative on March 10, 2006. The following items were retained: Garmin 296; Apollo MX 20; and Garmin 330. The Garmin 330 and Apollo MX 20 were released to the aircraft recovery facility on May 25, 2006. The Garmin 296 was released to the aircraft recovery facility on July 11, 2006. The NTSB did not retain any parts or pieces of the wreckage.

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Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used NA	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach: Unknown					
VFR Approach/Landing: Unknown					
Aircraft Information					
Aircraft Manufacturer Cessna		Model/Series 182Q		Serial Number 18266048	
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft?	Number of Seats: 4	Certified Max Gross Wt.	2950 LBS	Number of Engines: 1	
Engine Type: Reciprocating		Engine Manufacturer: Teledyne Continental		Model/Series: O-470-U	Rated Power: 230 HP
- Aircraft Inspection Information					
Type of Last Inspection Annual		Date of Last Inspection 02/2006	Time Since Last Inspection 3 Hours	Airframe Total Time 2958.87 Hours	
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes		ELT Operated? No		ELT Aided in Locating Accident Site? No	
Owner/Operator Information					
Registered Aircraft Owner Signal Mountain Aviation, Inc.		Street Address			
		City Wilmington	State DE	Zip Code 19810	
Operator of Aircraft William Kupiec		Street Address			
		City La Jolla	State CA	Zip Code 92037	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

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First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 68
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Sex: M	Seat Occupied: Right	Principal Profession: Non-Occupational Pilot	Certificate Number: On File
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Certificate(s): Private

Airplane Rating(s): Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): None

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft?	Current Biennial Flight Review? 03/2005
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Medical Cert.: Class 3	Medical Cert. Status: Without Waivers/Limitations	Date of Last Medical Exam: 08/2005
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	322	233	321		7		34			
Pilot In Command(PIC)	145	96	145		6		31			
Instructor										
Last 90 Days	36	36	36				14			
Last 30 Days	20	20	20				3			
Last 24 Hours	1	1	1							

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? Yes	Second Pilot? No
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Flight Plan/Itinerary

Type of Flight Plan Filed: None

Departure Point Same as Accident/Incident Location	State	Airport Identifier KSEE	Departure Time 1638	Time Zone PST
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Destination San Diego	State CA	Airport Identifier KSDM	
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Type of Clearance: VFR

Type of Airspace: Class D

Weather Information

Source of Briefing:

Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
KSEE	1647	PDT	388 Ft. MSL	3 NM	360 Deg. Mag.
Sky/Lowest Cloud Condition: Thin Broken			20000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		20000 Ft. AGL		Visibility: 25 SM	Altimeter: 29.93 "Hg
Temperature: 23 °C	Dew Point: °C	Wind Direction: 260		Density Altitude: Ft.	
Wind Speed: 8	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): Ft.	Visibility (RVV) SM	Intensity of Precipitation:			
Restrictions to Visibility: No Obscuration; No Precipitation					
Type of Precipitation:					

Accident Information		
Aircraft Damage: Destroyed	Aircraft Fire: Ground	Aircraft Explosion: None

Classification:					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	1				1
Other Ground					
- GRAND TOTAL -	1				1

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX06FA106B

Occurrence Date: 02/08/2006

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Kristi Dunks

Additional Persons Participating in This Accident/Incident Investigation:

Dan Johnson
Federal Aviation Administration
San Diego, CA

Tom Moody
Cessna Aircraft Company
Wichita, KS

James Kemp
National Air Traffic Controllers Association
Palmdale, CA