

National Transportation Safety Board  
Washington, DC 20594

Brief of Accident

Adopted 03/26/2007

|  |            |              |                         |                         |            |
|--|------------|--------------|-------------------------|-------------------------|------------|
| LAX06FA106A<br>File No. 21116                          | 02/08/2006 | El Cajon, CA | Aircraft Reg No. N9531B | Time (Local): 16:42 PST |            |
| Make/Model: Cessna / 172RG                             |            |              | Fatal                   | Serious                 | Minor/None |
| Engine Make/Model: Textron Lycoming / O-360-F1A6       |            |              | Crew 2                  | 0                       | 0          |
| Aircraft Damage: Destroyed                             |            |              | Pass 0                  | 0                       | 0          |
| Number of Engines: 1                                   |            |              |                         |                         |            |
| Operating Certificate(s): None                         |            |              |                         |                         |            |
| Type of Flight Operation: Instructional                |            |              |                         |                         |            |
| Reg. Flight Conducted Under: Part 91: General Aviation |            |              |                         |                         |            |

Last Depart. Point: Same as Accident/Incident Location  
Destination: Brown Field, CA  
Airport Proximity: Off Airport/Airstrip

Condition of Light: Day  
Weather Info Src: Weather Observation Facility  
Basic Weather: Visual Conditions  
Lowest Ceiling: 20000 Ft. AGL, Broken  
Visibility: 25.00 SM  
Wind Dir/Speed: 260 / 008 Kts  
Temperature (°C): 23  
Precip/Obscuration: No Obscuration; No Precipitation

Pilot-in-Command Age: 22

Flight Time (Hours)

Certificate(s)/Rating(s)  
Flight Instructor; Commercial; Multi-engine Land; Single-engine Land  
Instrument Ratings  
Airplane

Total All Aircraft: 570  
Last 90 Days: 45  
Total Make/Model: Unk/Nr  
Total Instrument Time: 130

A Cessna 182Q and a Cessna 172RG, were operating in class D airspace and departed from the same airport. The Cessna 172RG was operating under instrument flight rules as an instructional flight (IFR) and receiving radar service from an approach control facility, while the Cessna 182 was operating under visual flight rules (VFR) and had been released from communication with air traffic control. The pilot undergoing instruction in the Cessna 172RG was most likely wearing a view limiting device which tasked the certified flight instructor seated in the right seat to serve as both an instructor and a safety pilot. The Cessna 172RG departed first, performing a right 260-degree turn over the airport and was assigned a southwest heading by the controller. The Cessna 182Q departed to the west and made a left turn, while climbing in a southeasterly direction. The heading assigned to the Cessna 172RG put it on a direct collision course with the Cessna 182Q, with a collision angle of 40 degrees. Following a discussion with the controller about the pilot's intentions upon completion of an approach, the controller instructed the Cessna 172RG to fly heading 190. The pilot read back, "One nine" and no further transmissions were received from the Cessna 172RG. In class D airspace, there is no specified separation requirement between VFR and IFR aircraft. However, controllers still have a responsibility to be vigilant for potential collisions between aircraft under these circumstances. This accident occurred after the controllers in communication with the Cessna 172RG had received a sustained conflict alert involving the Cessna 172RG and Cessna 182Q (operating on a VFR transponder code), but failed to recognize or resolve the conflict. Comparisons of the calculated convergence angles of the two airplanes showed that for an 85th percentile male seated in the left seat (Cessna did not create pilot view angles for pilots seated in the front right seat), the Cessna 172RG pilot was about 15 degrees outside of the right view angle and the Cessna 182Q pilot was within about 6 degrees of the left view angle.

Brief of Accident (Continued)

LAX06FA106A

File No. 21116

02/08/2006

El Cajon, CA

Aircraft Reg No. N9531B

Time (Local): 16:42 PST

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Occurrence #1: MIDAIR COLLISION  
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND(CFI)
  2. (F) EXCESSIVE WORKLOAD (TASK OVERLOAD) - PILOT IN COMMAND(CFI)
  3. (C) VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT
  4. (F) IFR SEPARATION STANDARDS - NOT COMPLIED WITH - ATC PERSONNEL(ARTCC)
  5. (F) TRAFFIC ADVISORY - NOT ISSUED - ATC PERSONNEL(ARTCC)
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - GROUND

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident as follows.

The pilots of both airplanes failure to maintain an adequate visual lookout due to their relative flight paths, which limited the available visual cues. Factors were the failure of the air traffic controller(s) to issue a conflict alert to the Cessna 172RG after repeated visual and aural warnings of an impending collision and the task load of the certified flight instructor.