



Aviation Investigation Factual Report

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| Location: | Glendale, Arizona | Accident Number: | LAX05LA170 |
| Date & Time: | May 14, 2005, 15:00 Local | Registration: | N791MA |
| Aircraft: | Diamond Aircraft Industries DA 20-C1 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Factual Information

On May 14, 2005, about 1500 mountain standard time, a Diamond DA 20-C1, N791MA, experienced a hard landing at the Glendale Municipal Airport (GEU), Glendale, Arizona. The pilot/owner was operating the airplane under the provisions of 14 CFR Part 91. The private pilot, the sole occupant, was not injured; the airplane sustained substantial damage. The personal local area flight departed Glendale about 1345. Day visual meteorological conditions prevailed, and no flight plan had been filed. The primary wreckage was at 33 degrees 31 minutes north latitude and 112 degrees 17 minutes west longitude.

An hourly weather report issued for GEU at 1457 reported winds from the west at 5.8 miles per hour (mph) with a temperature of 93.2 degrees Fahrenheit and a dew point of 28.4 degrees Fahrenheit. At 1547, the hourly weather observation reported winds from the north-northeast at 4.6 mph with a temperature of 93.2 degrees Fahrenheit and a dew point of 26.6 degrees Fahrenheit.

During the first interview with the National Transportation Safety Board investigator-in-charge (IIC) on the day of the accident, the pilot stated that he was making a straight in approach for runway 19 from the north. The pilot reported that the approach was normal and he recalled Automatic Terminal Information Service (ATIS) reporting winds at 4 knots. He "felt ground effect" and noted the airspeed at 44 knots (normal landing airspeed is between 40-44 knots). He said that he pulled the throttle control all the way out and the nose dropped and impacted the runway. He further reported that he may have prevented the accident by not pulling the throttle control all the way out. He added that there were no preimpact mechanical malfunctions or failures with the airplane.

In a second interview with the pilot on June 6, 2005, he reported that he flared too high, and the airplane stalled. During this interview he also felt that if he had initiated a go-around the accident could have been prevented.

The Federal Aviation Administration (FAA) accident coordinator and another FAA inspector examined the airplane and noted damage to the firewall. On June 30, 2005, the pilot voluntarily surrendered his pilot's certificate and medical to the local FAA Flight Standards District Office.

Pilot Information

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| Certificate: | Private | Age: | 36,Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 | Last FAA Medical Exam: | August 1, 2003 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 388 hours (Total, all aircraft), 297 hours (Total, this make and model), 25 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------------|---------------------------------------|----------------------|
| Aircraft Make: | Diamond Aircraft Industries | Registration: | N791MA |
| Model/Series: | DA 20-C1 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | AF6337 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | 1654 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 54.5 Hrs as of last inspection | Engine Manufacturer: | Teledyne Continental |
| ELT: | Installed, not activated | Engine Model/Series: | IO-240-B |
| Registered Owner: | On file | Rated Power: | 124 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | PHX,1103 ft msl | Distance from Accident Site: | 15 Nautical Miles |
| Observation Time: | 14:51 Local | Direction from Accident Site: | 110° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | Broken / 15000 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | / None | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.84 inches Hg | Temperature/Dew Point: | 34°C / -3°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Glendale, AZ (GEU) | Type of Flight Plan Filed: | None |
| Destination: | (GEU) | Type of Clearance: | None |
| Departure Time: | 13:45 Local | Type of Airspace: | |

Airport Information

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|----------------------|--------------------------------|---------------------------|---------------------------|
| Airport: | Glendale Municipal Airport GEU | Runway Surface Type: | Asphalt |
| Airport Elevation: | | Runway Surface Condition: | Dry |
| Runway Used: | 19 | IFR Approach: | None |
| Runway Length/Width: | 7150 ft / 100 ft | VFR Approach/Landing: | Full stop;Traffic pattern |

Wreckage and Impact Information

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|------------------------|--------|-------------------------|----------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 33.526943,-112.29528 |

Administrative Information

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| Investigator In Charge (IIC): | Cornejo, Tealeye |
| Additional Participating Persons: | Steve D'urso; Federal Aviation Administration; Scottsdale, AZ |
| Report Date: | December 13, 2006 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=61544 |

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

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