Aviation Investigation Final Report

Location:	Bullhead City, Arizona	**Accident Number:**	LAX06FA243
Date & Time:	July 23, 2006, 16:00 Local	**Registration:**	N241JL
Aircraft:	Raytheon Aircraft Company G36	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane collided with a dirt berm during an aborted landing. A bartender reported that about 5.5 hours prior to the accident, she served the pilot four alcoholic beverages, though he never appeared to be intoxicated. The pilot and the two passengers left the bar together about 1 to 2 hours prior to the accident, and a designated driver transported them to the airport. According to the designated driver, the pilot did not appear to be intoxicated. A witness observed the airplane taxi past his hangar to the active runway and takeoff. He reported that the airplane made erratic s-turns up the taxiway and also climbed out in an erratic manner. According to the surviving passenger, who was in the front-right seat, after a 25-minute flight, the pilot made an approach to the airport and touched down over halfway down the runway. The airplane landed hard and bounced back airborne, continuing down the runway about 2 to 3 feet above ground level (agl). After reaching the end of the runway, the airplane touched back down on the surface. The pilot attempted to abort the landing, but the airplane continued into the brush and impacted a dirt berm. Post accident examinations of the airframe and engine revealed no evidence of mechanical malfunctions or failures. The FAA toxicological tests on the pilot's specimens found that the post-mortem blood ethanol level was 0.365 percent, with a post-mortem urine ethanol level at 0.357 percent. Although there was evidence of putrefaction, careful analysis established that most of the ethanol found in the specimens was a result of ingestion, and at the time of the accident, the pilot's blood alcohol concentration (BAC) was at or above 0.30 percent. On his FAA application for a medical certificate, the pilot reported one Driving Under the Influence (DUI) conviction, which occurred over 5 years prior to the accident (2 years prior to submitting the application); the FAA medical records contained no details of that DUI, but review of the arrest records noted that the pilot's BAC was 0.28 percent during that arrest. Review of Federal Bureau of Investigation (FBI) records indicated that the pilot actually had three additional convictions for drug and/or alcohol related offenses, including another DUI about 12 years prior to the accident. The FAA specifically disqualifies pilot applicants with a history or clinical diagnosis of substance dependence, which is defined in 14 CFR 67.107, 67.207, and 67.307 as "evidenced by (A) increased tolerance, (B)

manifestation of withdrawal symptoms, (C) impaired control of use, or (D) continued use despite damage to physical health or impairment of social, personal, or occupational functioning." The FAA additionally requires that airmen report any convictions involving driving while intoxicated or while under the influence of alcohol or a drug, and performs a National Driver Register (NDR) inquiry for each medical application to verify that all such convictions are in fact reported. Because of individual state variances on the length of time convictions stay on record, and periodic purges of convictions by States from the NDR, the data in the NDR may not show all convictions for a specific individual. The only national database that retains all convictions is the FBI's records. The FAA only references FBI records for an applicant in the rare instance when credible information suggests that multiple unreported convictions may exist. A senior legal attorney for the FAA reported that the agency does not have legal authority to routinely access FBI criminal records.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged distance and speed that led to a long landing, and his inadequate recovery from a bounced landing, all due to the effects of impairment from alcohol consumption, which resulted in an in-flight collision with terrain during an aborted landing attempt. A contributing factor was the Federal Aviation Administration's failure to identify existing evidence of substance (alcohol) dependence in the pilot due to an inadequate and incomplete process of screening medical applications.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - ABORTED

Findings
1. TERRAIN CONDITION - BERM
2. DISTANCE/SPEED - MISJUDGED - PILOT IN COMMAND
3. (C) IMPAIRMENT(ALCOHOL) - PILOT IN COMMAND
4. (F) INADEQUATE CERTIFICATION/APPROVAL,AIRMAN - FAA(ORGANIZATION)
5. (C) PROPER TOUCHDOWN POINT - NOT OBTAINED - PILOT IN COMMAND
6. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
7. (C) ABORTED LANDING - IMPROPER - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On July 23, 2006, about 1600 mountain standard time, a Raytheon Aircraft Company G36, N241JL, collided with a dirt berm during an aborted landing at Eagle Airpark, Bullhead City, Arizona. The pilot was operating the airplane under the provisions of 14 CFR Part 91. The private pilot and one passenger (seated in the aft rear seat) sustained fatal injuries. The remaining passenger (who was seated in the right front seat) sustained serious injuries. The airplane sustained substantial damage and was consumed by fire. The local personal flight originated from Eagle Airpark about 1530. Visual meteorological conditions prevailed, and a flight plan had not been filed.

The National Transportation Safety Board investigator-in-charge (IIC) interviewed a witness, who was a pilot. He stated that on the afternoon of the accident, he heard an airplane engine start and stepped outside of his hangar to identify which airplane it was. He observed the accident airplane near the end of the taxiway, on the south end of the Airpark. He kept his eyes affixed to the airplane as it began to taxi in his direction to the departure end of runway 17. He noted that the pilot appeared to be preoccupied, as the airplane made erratic s-turns up the taxiway. The airplane veered from side to side varying in power settings, as it would increase and then decrease in speed. From observing the airplane taxi, he assumed that the pilot was a student.

The airplane began the takeoff roll and remained relatively straight on the runway centerline. When reaching about 5/8 of the way down the runway the airplane became airborne. It made a step-like climb out, where it would momentarily gain altitude and then level out. The pilot made a left crosswind departure and it appeared as if the flight was headed toward the Needles very high frequency omni-directional range (VOR) navigation system.

The witness further stated that after a short time passed he was inside his hangar when he heard the airplane at a high power setting maneuvering over the runway, as if they were buzzing the field or performing a flyby. He subsequently heard the engine noise stop and he ran outside the hangar. He observed a big plume of dust just south of the irrigation ditch at the end of runway 17.

The Safety Board IIC interviewed a bartender who was employed at an establishment (saloon) recently purchased by the pilot. She stated that pilot and rear-seat passenger (who was a double amputee) had celebrated their birthdays together the day prior to the accident, by having a party at the pilot's saloon. The night of the party it was decided that as a birthday present to the rear-seat passenger, the pilot would take him for a flight to see the Colorado River the following day.

The bartender further reported that on the day of the accident, the pilot arrived at the saloon about 1030. He appeared to be in a good mood and refreshed; there was no evidence that he was hung-over. While he was at the bar, she served the pilot four alcoholic beverages (two shots and two mixed drinks) and he never appeared to be intoxicated; the rear-seat passenger had about five alcoholic drinks and was showing the affects of alcohol consumption. The front-seat passenger arrived at the saloon about 30 minutes before the three of them left for the flight; she served him one drink and one shot. They all left the bar together about 1400 to 1500 and were picked up by a designated driver. The pilot indicated that the flight would be about an hour long.

During a telephone conversation with the Safety Board IIC, the designated driver who transported the pilot and passengers to the Airpark from the saloon, stated that the pilot did not appear to be intoxicated. After arriving at the hangar, the pilot started the engine and maneuvered the airplane onto the taxiway. He told the driver that he would call him after they landed to get a ride back to the saloon.

A paramedic for the Mohave Valley Fire Department recalled responding to the accident about 10 to 15 minutes after it occurred. He stated that when he arrived the front-seat passenger was outside of the airplane and appeared to have suffered second-degree burns. Before being given Morphine, the patient was asked if he had consumed any alcohol that day. He replied that he had consumed "a couple of beers and a couple of shots." The paramedic stated that he could smell alcohol on the breath of the patient.

The Safety Board IIC interviewed the sole surviving (front-seat) passenger about 20 days after the accident occurred. He stated that the day of the accident he arrived at the pilot's saloon to discuss business with the pilot. Over a period of 20 minutes, both of the men consumed an alcohol beverage. The pilot stated that he was intending to take the rear-seat passenger on a plane ride before leaving back to his home in Orange County, California, which he planned to do later that evening. The pilot asked the surviving passenger if he would like to accompany them, to which he accepted the invitation. All three men received a ride to the airport by the bar's designated driver.

Upon arriving at the airplane, the pilot performed a preflight inspection and they all boarded the airplane. He sat in the right front seat, and the other passenger was positioned in the rear-left seat. He added that his headset did not work correctly and he could not hear the pilot in the headsets, rather they had to yell at one another to communicate. All men put on their respective seat belts and shoulder harnesses; no safety briefing was given. The conditions at the airport were very hot and there was a crosswind.

The surviving passenger recalled that flight departed normally and the pilot maneuvered the airplane over the river and town for about 20 to 25 minutes. The pilot then asked if the passengers wanted to continue to Orange County with him, to which he replied that he had to get back to the airport. The airplane made an approach to the airport and touched down on

the runway over halfway down the surface. The airplane touched down and bounced back airborne. The airplane then encountered a gust of wind that pushed it to the right of the runway centerline. The airplane continued down the runway about 2 to 3 feet above ground level (agl) until reaching near the end of the runway surface where it touched back down. Although the pilot did not communicate with him, the surviving passenger thought that the pilot decided to abort the landing and attempt to go-around again.

The surviving passenger further stated that the airplane continued into the brush and impacted a dirt berm. The next memory he had of the accident sequence was after the airplane had come to rest in the mud. The right side of the airplane had become engulfed in flames and he looked over to the pilot who was hunched over in his seat and appeared to be unconscious. The rear-seated passenger then yelled at the surviving passenger to help him egress the airplane. After he exited, the surviving passenger attempted to open the back door that was on the right side of the airplane. He tried to open the door to no avail; he attributed his inability to open the door to it being locked from the inside. There was a subsequent explosion and the surviving passenger was thrown back (lifted airborne) aft of the tail. The airplane was consumed by fire.

PERSONNEL INFORMATION

Flight Experience

According to the Federal Aviation Administration (FAA) Airman and Medical records, the pilot held a private pilot certificate with airplane ratings for single engine land and instrument flight. The pilot's only medical examination performed by an Aviation Medical Examiner was conducted on November 11, 2003, when the pilot applied for and was issued a third-class airmen medical and student pilot certificate. No personal flight records were recovered for the pilot.

As part of an application for insurance on the accident airplane, the pilot completed a "Pilot Experience Form," that was dated February 01, 2006. On the form he indicated that he had amassed 420 hours of total flight experience, of which 270 hours was conducted in the pervious 12 months. The form revealed that he had acquired 94.6 hours of flight time in Bonanza G36 series airplanes. The pilot made a notation on the form that he had previously been convicted of a traffic violation consisting of a Driving Under the Influence (DUI) offense in May 01, 2001; he did not note any other convictions or violations.

Alcohol History

A review of the pilot's medical application revealed that the pilot checked the box "yes" in response to question 18.v. "History of (1) any conviction(s) involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug; or (2) history of any conviction(s) or administrative action(s) involving an offense(s) which resulted in the denial, suspension, cancellation, or revocation of driving privileges or which resulted in attendance at

an educational or rehabilitation program." In the "explanations" area following that box, the pilot wrote "May, 2001 DUI". The pilot checked the box "no" in response to question 18.n., which queried if the applicant had, or currently has substance dependence. The FAA Aerospace Medical Certification Division records contained no indications of either a request for or receipt of additional documentation of the pilot's arrest or prior alcohol history.

The Safety Board IIC obtained the arrest report for the DUI conviction the pilot listed on his medical application. The Santa Ana Police Department arrested the pilot for driving while intoxicated at 2355 on May 05, 2001. A review of the report indicated that the pilot refused a field sobriety test, opting to take a blood test instead (the sample was obtained about an hour after the initial arrest). The Forensic Alcohol Examination Report associated with the blood test indicated the pilot's blood alcohol concentration (BAC) was 0.28 percent (wt/vol) at the time of testing.

A review was conducted of the pilot's Federal Bureau of Investigation (FBI) Interstate Identification Index (III) record [a compilation of an individual's criminal identification, arrest, conviction, and incarceration information that contains information voluntarily reported by law enforcement agencies across the country, as well as information provided by other federal agencies]. The pilot had a conviction for the attempt and conspiracy to distribute cocaine in 1991. He additionally had two convictions in Florida, one of which was a DUI in 1994, and the other was for water skiing while intoxicated in 1995. The report also cited the DUI in 2001 that the pilot had reported to the FAA.

AIRCRAFT INFORMATION

No airplane or engine maintenance records were located. A review was conducted of the material maintained by the FAA in the Aircraft and Registry files for this airplane. The Raytheon Aircraft Company G36 single engine airplane, serial number E3644, was manufactured in 2005. Records indicate that the pilot, the first and only owner, purchased the airplane from the manufacturer in December 2005. The engine was a Teledyne Continental Motors IO-550B (39), serial number 687085.

While no formal maintenance logbooks as such were located, the Safety Board IIC found a cluster of bound papers that were mostly burnt within the wreckage of the cockpit. One of the papers had an entry for the airworthiness certificate inspection, which was signed as completed on December 08, 2005, at an airplane total time of 3.6 hours. A partially consumed work order was additionally found, that indicated an engine oil change was completed on January 25, 2006, at a total time of 66.6 hours.

Airplane Doors

According to the accident airplane's applicable Airplane Flight Manual (AFM) and Maintenance Manual (MM), the G36 series airplane is equipped with two main egress doors: the cabin door and utility doors. The forward cabin door is located on the right side of the fuselage, adjacent

to the front passenger seat. The door is hinged on the forward portion of the door at two points, with a stop located on the bottom edge. It is opened from inside the cabin by depressing a lock button and a simultaneous clockwise rotation of the door handle. The utility exit is located on the aft right side of the fuselage, and consists of two doors. The forward door is hinged on the forward side and the aft door is hinged on its aft side.

METEOROLOGICAL INFORMATION

A routine aviation weather report (METAR) for Needles, California, 7.3 nautical miles from Eagle Airpark on a bearing of 183 degrees, reported that at 1556 the temperature was about 117 degrees Fahrenheit with an altimeter setting of 29.67 inHg; the wind was reported from 110 degrees at 6 knots.

Utilizing the aforementioned weather information and the airport elevation of 485 feet mean sea level (msl), the density altitude at the time of the accident was computed by a Safety Board computer program to be approximately 4,627 feet msl.

The wind conditions in Bullhead City were reported by a local station to be from the south at 3 miles per hour (mph) gusting to 18 mph at the time of the accident.

WRECKAGE AND IMPACT

The Safety Board IIC performed an on-scene wreckage documentation and initial examination on July 24, 2006, the day following the accident.

The accident site was located adjacent to Eagle Airpark, about 320 feet from the departure end of runway 17, and just west of the extended runway centerline. The global positioning satellite (GPS) coordinates for the main wreckage were approximately 34 degrees 52.86 minutes north latitude by 114 degrees 36.97 minutes west longitude. The terrain was characteristically flat with vegetation typical of the Arizona/Nevada desert. The initial impact sites were located in an area dividing the airpark from agricultural crops. Situated south of the airpark was a dirt berm about 10 feet in height and inclined at a 45-degree angle. Immediately south and directly adjacent to the berm was a 10.5-foot-wide irrigation canal, which was oriented in an east-west direction. There were two haystacks about 13.3 feet in height located about 12 feet south of the irrigation canal. They were positioned on either side of the extended centerline with 150 feet separating them laterally. The main wreckage site was about 56 feet south of the irrigation canal in a cotton field composed of small crop and soft muddy soil.

The first identified point of contact consisted of runway tire markings at the departure end of runway 17. In the terrain south of the runway's end, there were two parallel indentations in the surrounding brush and dirt. The indentations were continuous for 354 feet and consistent in shape and size to the main landing gear. Numerous brush plants appeared to have recently been severed in areas in-between the indentations. The marking from the runway aligned with the indentations in the brush, all of which were oriented in a north-south direction.

The principle impact crater was located on the dirt berm south of the severed brush, and identified by three parallel, elongated grooves. The grooves were additionally on a north-south orientation and the outer markings aligned with the runway and brush markings to the north. The indentations were apparent at the base of the berm and continued upslope until reaching the plateau. The nose gear was imbedded adjacent to the middle marking on the berm, along with several shards of the nose structure undercarriage.

The main wreckage was situated about 430 feet south of the departure end of runway 17 on a southerly bearing; the aircraft nose was pointing to the west. The main wreckage consisted of all major components of the airframe, engine, and all of the control surfaces. The cowl, engine, spinner, and 3-bladed propeller came to rest about a 90-degree angle to the longitudinal axis of the fuselage. The wings were partially attached at their respective fuselage surfaces with the areas not attached being a result of fire consumption. The right main landing gear was consumed by fire and located near the most heavily burned area, under the inboard right wing. The left main landing gear was intact and appeared to be partially extended with the strut broken from the wing structure. The flap actuator extension measured 6.0 inches, which according to the Raytheon representative corresponds to the full extended (down) position; the wing flaps visually appeared to be extended. During recovery, liquid drained from the impact-damaged left and right wings and pooled beneath the wreckage; it was consistent in appearance and odor to that of 100LL Avgas.

The cabin and the fuselage were consumed by fire. All flight and engine instruments, along with cockpit system switches were thermally destroyed. The upper portion of the fuselage was completely burnt, with the remaining cabin area filled with dense ash and seat remains. Within the ashen remains of the fuselage, paperwork pertaining to aircraft maintenance work and aircraft airworthiness was located. In addition, five aluminum beverage cans were found; the fire damage rendered them impossible to visually identify.

No evidence of leading edge gouges or chordwise scratches were noted on the propeller blades, which had remained attached to the crankshaft mounting-flange. One blade appeared straight, and the other blade appeared bent in an aft direction. Two of the blades had been consumed by fire on their outboard half.

The Safety Board IIC established control continuity from all control surfaces to the consumed area of the cockpit.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Mohave County Medical Examiner on July 24, 2006. The examiner's pathological diagnosis as cause of death was noted as, "thermal injuries and smoke inhalation due to fiery plane crash."

The autopsy report contained a section detailing the internal examination of the pilot's

remains. The examiner reported that within the body cavities "no adhesions or abnormal collections of fluid" were found, with all body organs begin present and in "a normal anatomic position." The section of the report documenting the genitourinary tract stated that the urinary bladder contained "99mL of clear orange urine" and that the mucosa was "gray-tan and smooth."

The FAA Civil Aeromedical Institute (CAMI) performed toxicological screenings on the pilot. According to CAMI's report (#200600164001) the toxicological findings were positive for ethanol (alcohol). Specifically, the following was detected in the pilot's specimens: 365 (mg/dL, mg/hg) ethanol in blood, 357 (mg/dL, mg/hg) ethanol in urine, 245 (mg/dL, mg/hg) ethanol in muscle, 267 (mg/dL, mg/hg) ethanol in brain, 16 percent carbon monoxide in blood, and quinine in urine. The toxicology report additionally noted evidence of putrefaction in the specimens received.

TESTS AND RESEARCH

An examination of the wreckage was conducted on August 01, 2006, at the facilities of Air Transport, Phoenix, Arizona. Present to the examination was the Safety Board IIC, as well as representatives from both Raytheon Aircraft Company and Teledyne Continental Motors (TCM).

The airplane was separated into four major components for the purpose of recovery. The wreckage consisted of the left and right wing, fuselage (with empennage attached), and engine.

The left wing was thermally consumed from the root inboard about 3 feet. The wing flap control surface sustained crush deformation and was detached from the inboard hinge. The right wing was thermally consumed from the wing root to about 7 feet outboard. The aileron balance cable was traced by investigators and found to be intact and continuous until attaching to the bell cranks in both the left and right control surfaces. The left and right aileron cables were intact to the cockpit area, which was consumed by fire. In the thermally destroyed cockpit area the aileron chain was found separated, though the sprockets were intact.

Investigators established continuity of the rudder cable from the aft bell crank, along the pullies to the thermally destroyed cockpit. The elevator push pull tubes were affixed to the aft bell crank located in the empennage. The cables from that bell crank were attached to their respective arms and intact to the cockpit area. The elevator trim cables were intact from the cockpit to their respective actuators. The two elevator trim actuator extensions were measured, both of which were extended 1 3/16 inches, which the Raytheon representative stated correspond to a 4-degrees tab trailing edge up position.

The fuel selector was removed from the wreckage and disassembled. The selector position was aligned in the left tank position. Upon rotation of the handle, investigators noted no detent in the three selection options, which the Raytheon representative stated was consistent with

the thermal destruction of the unit. The fuel filter appeared to be installed correctly and was subjected to thermal damage.

The engine was detached from the airframe and thermal damage was observed on the right side, with the appearance of melted rocker box covers.

The crankshaft was rotated by means of investigators turning the crankshaft propeller flange. Thumb compression was established in all cylinders. Valve train continuity was observed, with equal lift action at each rocker assembly.

The top spark plugs were removed and photographed. The spark plug electrodes were undamaged, displaying a gray coloration, which the TCM representative stated was consistent with normal operation. Investigators examined the cylinder combustion chambers utilizing a lighted borescope. The cylinders all displayed a white coloration inside and the valves appeared to seat uniformly.

The right magneto was rotated by hand and produced spark at each post. Due to the extent of the impact damage, the left magneto could not be functionally tested, nor could the engine timing be ascertained.

The oil filter was removed and cut open, revealing a clean internal filter. The oil pump was removed and disassembled; the gears moved freely and the internal housing contained oil. There was no evidence of any pre-impact lubrication system contamination.

The fuel manifold valve was removed and disassembled. The screen was clear and the diaphragm bladder was intact; a trace amount of fluid was found in the cavity that had an odor and consistency similar to that of 100LL Avgas. The fuel pump was removed and hooked up to an electric drill with an ample supply of water near the input. When energizing the drill, investigators observed water flow from the outlet..

ADDITIONAL INFORMATION

Regulations

FAA regulation 14 CFR 91.17, alcohol or drugs, in part, stated:

(a) No person may act or attempt to act as a crewmember of a civil aircraft -- (1) Within 8 hours after the consumption of any alcoholic beverage; (2) While under the influence of alcohol; (3) While using any drug that affects the person's faculties in any way contrary to safety; or (4) While having .04 percent by weight or more alcohol in the blood. (b) Except in an emergency, no pilot of a civil aircraft may allow a person who appears to be intoxicated or who demonstrates by manner or physical indications that the individual is under the influence of drugs (except a medical patient under proper care) to be carried in that aircraft.

The FAA defines substance (including alcohol) dependence as "evidenced by (A) increased tolerance, (B) manifestation of withdrawal symptoms, (C) impaired control of use, or (D) continued use despite damage to physical health or impairment of social, personal, or occupational functioning" (14 CFR 67.107(a)(4)(ii), 67.207(a)(4)(ii), and 67.307(a)(4)(ii)). A history or clinical diagnosis of substance dependence is specifically disqualifying. The FAA requires that airmen report a history of substance (including alcohol) dependence on each application for airman medical certificate. The FAA additionally requires that airmen report any convictions involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug and performs a National Driver Register (NDR) inquiry for each application for medical certificate to verify that all such convictions are in fact reported.

According to 14 CFR 67.403, "No person may make or cause to be made -(1) A fraudulent or intentionally false statement on any application for a medical certificate," or "(2) A fraudulent or intentionally false entry in any logbook, record, or report that is kept, made, or used, to show compliance with any requirement for any medical certificate."

FAA Medical Applicant Screening

According to the lead investigator of the Regulatory Support branch in the FAA Security and Investigation Division, the FAA Medical Division electronically transmits all pilot medical applicant names into a query against the NDR. All positive matches will show up on a list that is disseminated among investigators that make up the regulatory support branch. These investigators attempt to confirm a positive identity of the applicant against the name matched in the NDR by either social security numbers, birth dates, or identifying features (e.g. eye color, height, etc.).

The lead investigator further stated that if the applicant had reported an offense on the medical application and that is the sole conviction listed on their NDR record, no additional investigation is conducted. If the offense has not been reported then investigators will contact the state that the conviction occurred in an effort to obtain certified documents of the arrest. She reported that in rare instances applicants will have indications of numerous traffic violations or a history of substance convictions/abuse. In these circumstances, and by the approval of the branch supervisor, an investigator will perform a query of the applicant's information against the FBI's III.

The lead investigator noted that even if the NDR record of applicant shows multiple convictions, an investigator must obtain the convicting state's certified documents of the arrest in an effort for it to be utilized in consideration of granting the applicant a medical. She reported that many states, such as Arizona, discard all records of a conviction after a 3-year duration, making it impossible for investigators to use such arrests as leverage against an applicant obtaining (or renewing) a medical certificate.

A senior attorney for the FAA reported that the agency does not have legal authority to access FBI records.

National Driver Register

The National Highway Traffic Safety Administration's National Driver Register (NDR) is a computerized database of information about drivers who have had their licenses revoked or suspended, or who have been convicted of serious traffic violations such as driving while impaired by alcohol or drugs. The database is populated electronically by individual state's Department of Motor Vehicles (DMV) personnel. Once a driver has his/her licenses revoked or suspended, or has been convicted of serious traffic violations, the DMV will enter the information in the NDR. When the driver's records are purged from the state (different with each state) the respective DMV will additionally purge the record from the NDR.

In such states as Florida (where the accident pilot received his first DUI), a driver's record is purged after 5 years pending that he/she has fulfilled the penalties involved with the offense (e.g. fulfilled the probation period, paid fines, etc.). In this case, the NDR record of a driver would not reflect any offenses 5 years after they occurred.

Alcohol Effects

The National Institute on Alcohol Abuse and Alcoholism addressed alcohol dependent individuals and their automobile driving abilities in publication No. 28, April 1995. It stated that "The tolerance acquired for a specific task or in a specific environment is not readily transferable to new conditions," and that "a driver encountering a new environment or an unexpected situation could instantly lose any previously acquired tolerance to alcohol's impairing effects on driving performance."

According to a publication distributed by the National Institutes of Heath, an advisory committee, and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), a BAC of 0.31 to 0.40 percent results in the following changes in an individual, "unconsciousness, death possible, coma," with the body affected by a change in breathing and heart rate.

Pilot Information

Certificate:	Private	**Age:**	42,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 None	**Last FAA Medical Exam:**	November 1, 2003
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	December 1, 2005
Flight Time:	420 hours (Total, all aircraft), 95 hours (Total, this make and model), 315 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Raytheon Aircraft Company	**Registration:**	N241JL
Model/Series:	G36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	E3644
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	December 1, 2005	**Certified Max Gross Wt.:**	3650 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	3.6 Hrs as of last inspection	**Engine Manufacturer:**	Teledyne Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-550B
Registered Owner:	APARTMENTS O C, INC.	**Rated Power:**	300 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	EED,916 ft msl	**Distance from Accident Site:**	7 Nautical Miles
Observation Time:	15:56 Local	**Direction from Accident Site:**	183°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	110°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.67 inches Hg	**Temperature/Dew Point:**	47°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bullhead City, AZ (A09)	**Type of Flight Plan Filed:**	None
Destination:	(A09)	**Type of Clearance:**	None
Departure Time:	15:30 Local	**Type of Airspace:**	

Airport Information

Airport:	Eagle Airpark A09	**Runway Surface Type:**	Asphalt
Airport Elevation:	485 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	17	**IFR Approach:**	None
Runway Length/Width:	4800 ft / 50 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
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:**	34.890834,-114.626945

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Scott Boek; Federal Aviation Administration; Scottsdale, AZ Josh Cawthra; Teledyne Continental Motors; Mobile, AL Paul Yoos; Ratheon Aircraft Company; Wichita, KS
Original Publish Date:	May 29, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64175