



National Transportation Safety Board Aviation Accident Final Report

Location:	VAN NUYS, CA	Accident Number:	LAX99FA101
Date & Time:	02/16/1999, 1306 PST	Registration:	N711TE
Aircraft:	Grumman G-1159	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The pilot flew the airplane on final approach above reference speed, landed long, overran the runway, and collided with airplanes in a tie down area. During the descent from 8,000 feet, and within 13 miles of the airport, the airplane reached speeds over 300 knots and attained descent rates in excess of 4,000 feet per minute. At 1.5 miles from the runway and 700 feet above the airport elevation, the airplane was descending at 3,000 feet per minute and flying over 200 knots. The reference speed was 138 knots with flaps 20 during the approach and 125 knots for landing. Company policy required the pilot to maintain speed within 10 knots of reference speed. Neither aircrew member considered a go around. The aircrew did not provide a safety briefing to the passenger. After the airplane came to rest, the aircrew evacuated the airplane prior to off-loading their passenger.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot performed inadequate in flight planning and decided to continue the approach and landing with excessive airspeed. The pilot failed to follow company directives, which required a go around under the encountered flight conditions. This led to a long landing, resulting in an overrun and collision with parked airplanes.

Findings

Occurrence #1: OVERRUN

Phase of Operation: LANDING - ROLL

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (C) PROCEDURES/DIRECTIVES - NOT COMPLIED WITH - PILOT IN COMMAND
3. (C) AIRSPEED(VREF) - EXCEEDED - PILOT IN COMMAND
4. (C) GO-AROUND - NOT PERFORMED - PILOT IN COMMAND
5. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

6. OBJECT - AIRCRAFT PARKED/STANDING
7. EVACUATION - NOT COORDINATED/DISEMINATED - FLIGHTCREW

Factual Information

HISTORY OF FLIGHT

On February 16, 1999, at 1306 Pacific standard time, a Grumman G-1159 (Gulfstream GII), N711TE, sustained substantial damage when it departed the end of runway 16R after landing at the Van Nuys, California, airport. The airline transport pilot licensed captain, first officer, cabin attendant, and sole passenger were not injured. Trans-Exec Air Service, Inc., was operating the flight as an on-demand, domestic, passenger flight under the provisions of 14 CFR Part 135. The airplane departed Montrose, Colorado, at 1335 mountain standard time on the nonstop cross-country flight to Van Nuys. The GII substantially damaged four parked and unoccupied airplanes on the ground when it traveled into a tie down area; a fifth airplane sustained minor damage. Day visual meteorological conditions prevailed, and an IFR flight plan had been filed.

According to the flight log in the airplane, the GII departed Westhampton Beach, New York, at 0957 eastern standard time with three crewmembers and eight passengers. That flight terminated in Montrose and seven passengers deplaned. The airplane then departed for Van Nuys.

The passenger stated the flight was unremarkable through the early stages of the approach into Van Nuys. All three crewmembers were in the cockpit area with the door to the cabin closed. The seat belt light illuminated but he received no other briefing. He stated the approach then assumed an angle steeper than any he had previously encountered and the speed was "very, very, very fast." He pressed his feet into the seat back in front of him. For the last 3 or 4 minutes of the flight he heard a loud, rapidly repeating, beeping sound through the cockpit door. He also stated that he usually hears two sounds during the approach. One he believes to be the speed brakes being deployed and the other the landing gear going down. He was not aware of the first sound on this flight, and he never got the sense that the airplane was slowing down.

The passenger reported that the airplane maintained its steep angle of descent and high speed until over the runway. After maintaining a high speed at what he estimated to be 30-40 feet over the runway for some time, the passenger said he thought the airplane had better get on the ground or go around. Then he felt the rear wheels touch down, but he thought the nose wheel was still in the air. Eventually the nose dropped but he didn't hear the thrust reversers spool up. He said he had no sense of slowing down as the airplane progressed down the runway. Then he heard the reversers spool up and he was pulled forward in his seat. Braking attempts did not feel successful to him; he could feel them cycle on and off. The airplane turned sharply to the left and felt like it was banking to the left. At that point he thought the right wheel was off the ground and the airplane would roll over. He could see that the airplane continued to travel over a grassy area and back onto pavement. Then he could see and hear it hitting parked airplanes. The airplane stopped and he did not see any fire.

The passenger stated that shortly after the airplane came to a stop, the cockpit door flew open and the crew tried to unsuccessfully open the entry door. He felt that none of the crewmembers directed any attention to him. At this point he noticed what he believed to be fuel running down the top of the wing and said, "I think we have a problem." He heard crewmembers say, "O God, we'll go out the back," and, "let's go". All three ran by him to the back of the airplane and exited through the baggage door without directing any comments to

him or offering any assistance. He went to the back of the airplane and jumped to waiting rescuers. He had not received an emergency briefing on either leg of the trip.

Several ground witnesses observed the airplane travel over the runway at what appeared to be higher than normal speed. The witnesses' positions are marked on the attached airport diagram. The runway was 8,001 feet long and had a displaced threshold of 1,430 feet.

Witness No. 1 was standing between the left and right runways at taxiway G7, which was 2,050 feet from the approach end of runway 16R. He stated the flaps appeared to be partially down when the airplane passed him, but he could not tell how far. He said the flaps were fully down when he arrived at the wreckage. The airplane appeared to touchdown near taxiway 13, which was past the air traffic control tower. He heard the engines spool up and a bang. As the airplane proceeded in the vicinity of taxiway 17, he observed heavy white smoke from the tires. The smoke was so thick that he could not observe the positions of the flaps, spoilers, or thrust reversers. He did not think the airplane could stop on the runway, so he jumped into his vehicle and followed it. The airplane departed the runway at 22F at a high rate of speed.

Witnesses No. 2 and No. 3 were mechanics experienced on Gulfstream airplanes. They were completing maintenance checks on an airplane at the east side of the landing threshold for runway 16R. Witness No. 2 was standing at the nose of the airplane with his back to the runway. Witness No. 3 was in the left seat in the cockpit of the airplane, and another mechanic was in the right seat.

Witness No. 3 noticed an airplane on final approach coming across the numbers. The nose appeared to be in a level to nose low attitude. The airplane was coming in really fast and he excitedly alerted the other mechanic in the cockpit. He thought the flaps appeared down, but he could not tell to what degree. He has seen many airplanes land here and thought most of them would be flaring at this point. He knew the airplane parked at the other end of the field and thought that they might be landing long. He saw a cloud of smoke, a cloud of dirt, and then the airplane was gone, "Just that quick."

Witness No. 2 was exchanging hand signals with witness No. 3. He saw both people in the cockpit look up and over him with strange expressions on their face. He turned around and recognized the GII go by him very fast. He observed that the flaps were down, but he couldn't tell how far down they were. He stated the touchdown looked hard, and the touchdown point was just before the tower. There appeared to be more skid smoke than normal. He saw big puffs of smoke from the brakes. He also noted alternating puffs of smoke then clearing. The right side smoked more than the left side. He was surprised at how fast the airplane reached the end of the runway.

Witness No. 4 observed the airplane after it came to rest. He observed a passerby standing by the back door of the airplane. He observed the copilot exit the airplane and move away; the other crewmembers followed. The passenger was the last to exit. After the passenger exited the airplane, everyone moved away and fire personnel arrived to take over the accident scene.

Tower personnel observed the airplane approach and continue along the runway at a high rate of speed. They observed heavy smoke. One controller thought the thrust reversers were not fully or evenly deployed.

PERSONNEL INFORMATION

The captain held an airline transport pilot certificate with ratings for single engine and multi-

engine land. The captain held type ratings for the CE-500, IA-jet, L1329, and the G1159. The captain held a first class medical that was issued on October 10, 1998, with no limitation or waivers. Company records indicated the captain completed recurrent training for pilot in command and second in command on January 31, 1999. The captain had 8,000 hours total time with 3,000 in this make and model. The captain flew 170 hours in the last 90 days, and 65 hours in the last 30 days.

All of the captain's experience in 14 CFR Part 135 operations was with this company. The company provided about half of the training and an outside vendor supplied the balance of the ground school training, including all of the simulator training. The outside vendor taught the crew resource management section of the recurrent training syllabus.

The copilot held an airline transport pilot certificate with ratings for single engine and multi-engine land. He held type ratings in the SA227, EMB120, and G1159. The copilot held a first class medical that was issued on January 20, 1999, with no limitations or waivers. The copilot completed initial training in a GII on June 13, 1998. He completed recurrent training for pilot in command and second in command in the GII on January 29, 1999. The copilot had 6,671 hours total time with 1,293 hours in this make and model. The copilot flew 117 hours in the last 90 days, and 57 hours in the last 30 days.

The copilot had been with the company 2 years. His previous employer was a commuter airline. The copilot said the airline training was more structured, and the transition from a scheduled to a nonscheduled work environment was difficult.

AIRCRAFT INFORMATION

The airplane was a 1971 Grumman G-1159, serial number 105, registered in the transport category with exemption No. 695a to 4b.437 "Fuel Jettisoning Provisions". The airplane's total time was 14,332 hours. The left and right engines were Rolls Royce Spey 511-8 models, serial numbers 8770 and 8726 respectively. The right engine was installed on the aircraft one week prior to the mishap and had accumulated 18.7 hours since overhaul.

On February 17, 1999, the Safety Board IIC and the FAA accident coordinator observed functional tests of the GII. Maintenance personnel installed another nose strut assembly and new main tire on the GII and towed it to The Jet Center at Van Nuys. Mechanics manually pulled two nose wheel steering cables that had been cut during the recovery process. The cockpit control followed these left and right movements. Mechanics performed operational checks as prescribed in the Gulfstream computerized maintenance program. The mechanics tested the ground spoiler, thrust reverse, and antiskid systems. Each unit satisfactorily complied with their respective test requirements. The mechanics did not conduct any run-up tests.

The operator completed additional run-up testing of the thrust reverse system. The IIC and a representative from Gulfstream observed the tests. The Gulfstream representative observed a check of the thrust reversers' rigging the following day and submitted a report of his findings.

The operator made multiple applications of both thrust reversers, both simultaneously and individually. The purpose of the test was to determine if the engines generated sufficient thrust to accelerate the airplane when the thrust reversers deployed.

The Gulfstream representative explained the operation of the thrust reverser system. With the power levers at idle, a physical stop on the mounting pylon permits, but limits, engine

acceleration from idle rpm to 71 to 78% HP RPM. As the thrust reversers begin to move to the full open position, the thrust reverser feedback cable rotates the pylon sector to permit the thrust reverser levers to advance engine HP RPM to a maximum 91.7 to 92.3% HP RPM. Once the thrust reverser levers are selected, it takes the thrust reverser doors 5 to 6 seconds to move from the stowed to the fully deployed position. During this time the engine is accelerating from idle to the rpm dictated by the position of the thrust reverser lever and the position of the Max Reverse stop.

The HP interlock check resulted in engine RPM settings of 84% and 84.4% for the left and right engines respectively, rather than the 71% to 78% specified. The operator used a spring scale to apply a 24-pound aft load to the power levers. The left and right engines accelerated to 88% and 86% respectively, rather than the specified maximum of 84%. The maximum reverse thrust peaked at 93.5% and 93% for the left and right engines respectfully, rather than the maximum 91.7% to 92.3% specified.

At the termination of the rigging check, the Gulfstream representative concluded that there did not appear to be any abnormalities in the operation of the airplane's thrust reversers that would have affected this accident.

Gulfstream engineers noted that unless the engines accelerated beyond 84% before the thrust reversers fully deployed, the difference in engine RPM would not actually result in an abnormal amount of forward thrust during the deployment cycle. They felt the operational checks supported the conclusion that this sequence did not occur.

Gulfstream engineers evaluated the effects of a deflated tire on stopping distance. They estimated a 7.6% reduction in total tire footprint area, which could have increased stopping distance by a comparable amount.

AIRPORT INFORMATION

The Airport/ Facility Directory, Southwest U. S., indicated runway 16R at Van Nuys was 8,001 feet long by 150 feet wide and constructed of asphalt/ concrete. The approach slope angle was 3.9 degrees with a threshold crossing height of 54 feet; the threshold was displaced 1,430 feet (fence). The runway had a 0.7 % down slope, and airport elevation was 799 feet.

Van Nuys Operations provided a map of the airport and a table that listed the distances along the runway. The distance from taxiway 7G to the air traffic control tower was approximately 2,000 feet and 2,425 feet to taxiway 13. From abeam the tower, approximately 3,900 feet remained until the end of the runway.

METEOROLOGICAL INFORMATION

A routine aviation weather report (METAR) for Van Nuys was issued at 1318 PST. It stated: skies scattered at 10,000 feet, broken at 14,000 feet, overcast at 20,000 feet; visibility 9 miles; winds variable at 4 knots; temperature 63 degrees Fahrenheit; dew point 36 degrees; altimeter 30.12 inHg.

FLIGHT RECORDERS

The Safety Board Investigator In Charge (IIC) removed a Collins Model 642C-1 cockpit voice recorder, serial number 1846, from the airplane and sent it to the Safety Board Vehicle Recorder Laboratory in Washington D. C. A Cockpit Voice Recorder Group formed in the Laboratory on March 23, 1999. The group chairman prepared a transcript of the last 21:16

minutes of the 34:26 minute recording. The recording consisted of four channels of fair quality audio information. The group chairman correlated the timing on the tape to radar data time. The transcript began as the crew prepared for descent from cruise altitude at 1245:12 PST. It ended after the airplane overran the runway and the pilot turned off the electrical power at 1306:28.

Throughout the descent, no checklist items were heard.

At 1303:43, the copilot reported to Van Nuys tower that the airplane was approaching the San Fernando reservoir. At 1304:18 the captain remarked that it was, "one heck of a descent." The copilot chuckled and stated it should be interesting.

At 1304:28 a sound similar to a configuration alarm started and continued about 3 seconds. At this time a sound similar to landing gear operation began. The captain asked that the flaps be lowered to 20 degrees. The copilot responded, "flaps twenty," and followed that 8 seconds later with, "yeehaw." At 1304:58 the Ground Proximity Warning Sensor (GPWS) broadcast a sink rate warning. It repeated the sink rate warning three times, then repeated twice, "whoop whoop pull up." Eight seconds later a sound similar to the configuration alarm began and continued for 21 seconds. Simultaneously, the GPWS began to broadcast, "sink rate," which continued for 20 seconds.

The tower broadcast that the winds were from 130 degrees at 5 knots.

A sound similar to the configuration alarm began at 1305:44 and continued for 10 seconds. Eleven seconds later the captain called for flaps.

At 1306:01 a sound similar to hydraulic action associated with touchdown began and continued for 4 to 5 seconds. The copilot called out the status of the thrust reverser lights on the glareshield. At 1306:05 he reported two lights. At 1306:07, he reported four lights. At 1306:09 he called out six lights, and a sound similar to increased engine rpm began. Seven seconds later he told the captain they weren't going to make it. At 1306:22 a sound similar to engine rpm decreasing began. The recording ended at 1306:26 when the copilot said they were hitting something.

WRECKAGE AND IMPACT INFORMATION

The Federal Aviation Administration (FAA) accident coordinator measured 3,400 feet of skid marks on the 8,001-foot-long runway starting near taxiway 13 G. He measured another 1,072 feet to the airplane's final resting point.

The airplane traveled off the left side of runway 16R south of taxiway 22F. It traveled across a grassy area as it continued a sweeping left turn on a magnetic bearing of approximately 120 degrees. It entered the ramp area and turned to the right to a magnetic bearing of 160 degrees. The airplane struck a row of west facing parked airplanes with its the left wing and nose, then stopped on an easterly heading. The wing of one of these airplanes was lying on top of the GII's left wing. A ruptured fuel tank in this airplane's wing leaked fuel onto the top of the GII wing. The various airplanes knocked down or tore out approximately 100 feet of fence. The nose of the GII was over the fence and in a parking lot.

The left wing of the GII exhibited numerous scrapes and dents and had several large gouges in its leading edge. Several nose gear components suffered impact damage. The nose gear was pushed back and leaking fluid from a fractured line. The nose gear had to be removed to facilitate separation of the damaged airplane and more fluid leaked out. The outboard, right

main tire was flat. The IIC observed a flat spot with numerous layers of chord showing and a diagonal "X" pattern across the plies emanating from the center of the flat spot.

TESTS AND RESEARCH

A Safety Board specialist prepared a study of recorded radar data. The specialist used a Safety Board computer program to compute descent rate, ground speed, and distance from the runway. The airplane remained below an altitude of 10,000 feet msl for all data points.

Between 13.5 nm and 3.5 nm from the runway, the descent rate varied between 1,000 and 1,500 feet per minute (fpm). For a 2-minute period as it traveled this distance, the airplane's groundspeed was over 250 knots. The groundspeed computed to over 300 knots for about 45 seconds of that period. At 3.5 miles, the descent rate changed significantly and increased as the airplane neared the runway. The descent rate peaked at nearly 4,300 fpm.

The last data point was 1.5 nm from the runway threshold at 1,500 feet msl. The airport elevation is 799 feet. At the last data point, the descent rate was 3,000 fpm and the groundspeed was just above 200 knots.

The Van Nuys Noise Management Bureau plotted the airplane's flight path information. They calculated the groundspeed and descent rate between a point 9.2 nm from the runway at 5,500 feet msl to a point 0.6 nm from the runway at 1,100 msl. They computed speeds between 210 and 277 knots and descent rates between 1,000 and 3,430 fpm.

ADDITIONAL INFORMATION

The Safety Board Investigator In Charge (IIC) interviewed both crewmembers. The copilot provided an additional written statement. Pertinent parts of their statements follow.

The captain had flown this airplane on trips for several days prior to the accident and did not write up any deficiencies. The captain did not always conduct safety briefings for the passengers. The captain normally delegated the briefing to the cabin attendant, but did not direct the attendant to conduct a briefing on this flight. The captain was aware that the company specified mandatory altitude callouts during the approach. The captain did recall alerts sounding. The captain thought that the company required airspeed to be less than 10 knots above reference speed within 1 mile of the runway for a stabilized approach. Otherwise, the approach should be terminated.

The crew computed a reference speed for this approach of 138 knots with 20-degree flaps selected, and the desired landing speed was 125 knots. Maximum flap speed was 170 knots, and full flaps were usually selected 200 to 300 feet above the runway elevation. The captain thought they deployed the flaps on this flight before reaching the runway threshold. The captain recalled that the desired touchdown point was about 1,500 feet down the runway, but did not remember the actual touchdown point. The captain did not remember the computed landing distance, but said it typically required 2,500 to 3,000 feet. The captain, who had never flown an approach like this before, did not consider a go around, but did think the landing would be close.

The captain applied brakes and thrust reverse, but the rate of deceleration did not feel normal after application of the thrust reversers. The captain felt that the airplane accelerated as the thrust reversers deployed. When the airplane did not slow down, the captain applied heavier braking and thrust reverse. The captain followed this by heavy application of the brakes and thrust reverse. The airplane did not slow like it normally did; heavy braking and application of

thrust reverse usually throws the crew forward in their seats. The captain released the brakes as the airplane went off the runway and felt forward thrust.

The copilot had been with the company for 2 years. This approach was not standard according to the operations manual. It was unstable and he had never seen one like it before. He has seen others fly faster to get to the ground more quickly and save money. He routinely observed airspeeds below 10,000 feet in excess of the 250-knot maximum mandated by Federal Aviation Regulations. He completed the requisite checklists in his head rather than initiate the challenge response method.

He said aircrews did not provide an emergency brief to their passengers. The company taught him to fly, and even taxi, smoothly for the passengers. They taught him to avoid executing a go around so as to avoid exciting the passengers. Normal descent rates ranged between 700 and 1,000 fpm.

The copilot heard the speed brake and GPWS alerts sounding. He turned the GPWS alert off so he could communicate with the captain. He said neither one usually sounds, although the GPWS sometimes activated in mountainous regions.

The copilot's last look at the instrument settings occurred at the VOR and the flaps were set to 20 degrees. He estimated they were flying at 180 knots at a point 1.5 miles from the runway. He applied full flaps at 170 knots without being asked. He thought they touched down approximately 2,000 feet past the numbers, which would have put the airplane in the latter part of the touchdown zone. He recalled a threshold speed of 150 knots and felt a smooth touchdown. Neither aircrew member considered a go around, and the airplane had more speed than was needed for a go around. He did not think it would be close.

The copilot explained the callouts for the thrust reverser lights on the glare shield. Two lights meant both reversers were armed. Four lights indicated both were unlocked. Six lights indicated the reversers deployed. He did not recall seeing six lights, but did recall saying four lights, no reverse. He initially felt braking. The captain selected thrust reverse, deselected it, and then selected thrust reverse again. He did not feel any indication that the reversers deployed; he felt acceleration.

The copilot said he could not open the entry door, so he moved toward the rear of the airplane. He said he looked directly at the passenger and instructed the passenger to leave his bag and follow him. As he exited through the baggage door, a person on the ground instructed him to move away. That person stayed by the baggage door and helped the rest of the occupants to the ground.

The company operations manual specified that the pilot in command should assure that all passengers were provided an oral brief regarding emergency exits and their operation. The manual specified that passenger-briefing cards should be provided at each seat location, and the passenger should be encouraged to read the card during the oral brief. Following the accident, the operator completed a self-audit. They changed the operations manual to provide more detailed duties to the captain and copilot. The change also addressed passenger safety information and placement of the briefing cards.

A review of FAA Program Tracking and Reporting System (PTRS) data indicated that FAA inspectors completed over 10 surveillance inspections of the operator within the previous 10 months.

The IIC released the wreckage to the owner's representative

Pilot Information

Certificate:	Airline Transport	Age:	, Female
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	10/02/1998
Occupational Pilot:		Last Flight Review or Equivalent:	01/31/1999
Flight Time:	8000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 6200 hours (Pilot In Command, all aircraft), 170 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Commercial	Age:	, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	01/20/1999
Occupational Pilot:		Last Flight Review or Equivalent:	01/29/1999
Flight Time:	6671 hours (Total, all aircraft), 1293 hours (Total, this make and model), 4197 hours (Pilot In Command, all aircraft), 117 hours (Last 90 days, all aircraft), 57 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Grumman	Registration:	N711TE
Model/Series:	G-1159 G-1159	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	105
Landing Gear Type:	Retractable - Tricycle	Seats:	17
Date/Type of Last Inspection:	Continuous Airworthiness	Certified Max Gross Wt.:	62000 lbs
Time Since Last Inspection:		Engines:	2 Turbo Jet
Airframe Total Time:	14333 Hours	Engine Manufacturer:	Rolls-Royce
ELT:	Not installed	Engine Model/Series:	SPEY 511-8
Registered Owner:	TRANS EXEC AIR SERVICE INC.	Rated Power:	11400 lbs
Operator:	TRANS EXEC AIR SERVICE INC.	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	DVYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	VNY, 799 ft msl	Observation Time:	1318 PDT
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 10000 ft agl	Temperature/Dew Point:	17° C / 2° C
Lowest Ceiling:	Broken / 14000 ft agl	Visibility	9 Miles
Wind Speed/Gusts, Direction:	4 knots, Variable	Visibility (RVR):	0 ft
Altimeter Setting:	30 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	MONTROSE, CO (MTJ)	Type of Flight Plan Filed:	IFR
Destination:	VAN NUYS, CA (VNY)	Type of Clearance:	VFR
Departure Time:	1335 MST	Type of Airspace:	Class D

Airport Information

Airport:	VAN NUYS (VNY)	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	16R	IFR Approach:	Visual
Runway Length/Width:	8001 ft / 150 ft	VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	HOWARD D PLAGENS	Adopted Date:	07/15/2002
Additional Participating Persons:	BRIAN ASHTON; WP-VNY-FSDO; VAN NUYS, CA GREG HAMMERSTEIN; GULFSTREAM; SAVANNAH, GA		
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.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.