

# National Transportation Safety Board Aviation Accident Final Report

Location: HARTFORD, CT Accident Number: NYC93FA159

Date & Time: 08/17/1993, 0225 EDT Registration: N220KC

Aircraft: SWEARINGEN SA-226-TC Aircraft Damage: Destroyed

Defining Event: Injuries: 2 Fatal

Flight Conducted Under: Part 91: General Aviation - Positioning

## **Analysis**

ON AN APPROACH TO LAND AT THE DESTINATION, THE SECOND-IN-COMMAND (SIC) WAS FLYING THE AIRPLANE. THE PLANE TOUCHED DOWN WITH THE LANDING GEAR RETRACTED, & THE PROPELLER BLADES CONTACTED THE RUNWAY. THE SIC INITIATED A GO-AROUND (ABORTED LANDING). WITNESSES SAW THE AIRPLANE IN A STEEP LEFT BANK JUST BEFORE IMPACT IN A RIVER NEXT TO THE AIRPORT. PROPELLER STRIKES ON THE RUNWAY EXTENDED 380', INDICATING A TOUCHDOWN SPEED OF 96 KTS. THE LAST PROPELLER STRIKES ON THE RIGHT SIDE INDICATED A SPEED OF 86 KTS. THE LAST STRIKES ON THE LEFT SIDE INDICATED A SLOWING PROPELLER. PUBLISHED VMC FOR THE AIRPLANE WAS 94 KTS. THE CVR TAPE REVEALED THE CREW COMPLETED A DESCENT ARRIVAL CHECK, PERFORMED AN INCOMPLETE APPROACH BRIEFING, & DID NOT PERFORM A BEFORE LANDING CHECK. THE CVR REVEALED NO SOUND OF A GEAR WARNING HORN. COMPANY PERSONNEL STATED THAT THE CIRCUIT BREAKER FOR THE WARNING HORN HAD BEEN FOUND PULLED AT THE COMPLETION OF PREVIOUS FLIGHTS BY OTHER CREW; THIS WAS TO PREVENT A WARNING HORN FROM SOUNDING DURING A HIGH RATE OF DESCENT.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE COPILOT (SECOND-IN-COMMAND) TO FOLLOW THE CHECKLIST, ASSURE THE GEAR WAS EXTENDED FOR LANDING AND ATTAIN OR MAINTAIN ADEQUATE AIRSPEED (VMC); AND FAILURE OF THE PILOT-IN-COMMAND (PIC) TO PROPERLY SUPERVISE THE FLIGHT AND TAKE SUFFICIENT REMEDIAL ACTION.

## **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### **Findings**

1. LIGHT CONDITION - DARK NIGHT

- 2. (C) CHECKLIST NOT FOLLOWED COPILOT/SECOND PILOT
- 3. (C) GEAR EXTENSION NOT PERFORMED COPILOT/SECOND PILOT
- 4. (C) SUPERVISION INADEQUATE PILOT IN COMMAND

-----

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### **Findings**

PROPELLER SYSTEM/ACCESSORIES - OVERLOAD

-----

Occurrence #3: LOSS OF CONTROL - IN FLIGHT Phase of Operation: LANDING - ABORTED

#### **Findings**

6. ABORTED LANDING - INITIATED - COPILOT/SECOND PILOT

- 7. (C) AIRSPEED(VMC) NOT MAINTAINED COPILOT/SECOND PILOT
- 8. (C) REMEDIAL ACTION INADEQUATE PILOT IN COMMAND
- 9. (C) AIRCRAFT CONTROL NOT MAINTAINED

-----

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

#### **Findings**

10. TERRAIN CONDITION - WATER

Page 2 of 12 NYC93FA159

### **Factual Information**

#### HISTORY OF FLIGHT

On Tuesday, August 17, 1993, about 0225 eastern daylight time, a Swearingen SA-226, N220KC, owned by Aviation Services, Inc. (ASI), of Hartford, Connecticut, was destroyed when it impacted and sank in the Connecticut River, following an aborted landing at the Hartford-Brainard Airport, Hartford, Connecticut. Both pilots received fatal injuries. Instrument meteorological conditions prevailed. An instrument flight plan had been filed for the flight operating under 14 CFR 91.

The Pilot-In-Command (PIC), Scott Cobble, and the Second-In- Command (SIC), Gary Payne, departed the Hartford-Brainard (HFD) airport as a crew in N220KC for a scheduled three day mission, on August 15, 1993. They arrived in Atlantic City (ACY), New Jersey, about 0930. During the day, they completed two round trip flights in two different company Shorts, SD3 airplanes, and terminated the days flying at ACY, about 2345.

The crew was off duty from their arrival at ACY until the evening of August 16, 1993, at a company provided motel room. At 2100, they departed ACY for Springfield, Massachusetts, in N220KC, and arrived back at ACY at 2350. Their final departure from ACY was at 0010, August 17, 1993. They arrived at La Guardia (LGA) Airport, New York, at 0050, discharged passengers, and departed LGA at 0100, for FRG. They arrived at FRG at approximately 0115, shut the airplane down, and discharged the remaining passengers.

The PIC telephoned the ASI Director of Operations in Hartford, Connecticut, and advised him of their location and their estimated time of arrival at HFD. The director of Operations stated that the communication was a normal procedure and that the PIC seemed composed, and expressed no complaints.

At 0123, a crewmember telephoned New York Automated Flight Service and requested the weather at HFD. A weather briefing was provided along with the telephone number for the crew to obtain an instrument clearance from New York Tri-Area Radar Control (TRACON).

A crewmember of N220KC obtained the Instrument Flight Rules (IFR) clearance by telephone, and at 0153 was issued a takeoff release by telephone, with a void time of 0204. The PIC, whose voice was identified by the ASI, Director of Operations, from the cockpit voice recorder tape, reported airborne from FRG at 0203 to the TRACON controller. Post accident investigation revealed that the PIC was seated in the left seat and the flying SIC was seated in the right seat.

Radar contact was established with N220KC and a climb was issued to 5,000 feet where it remained until the initial descent into Hartford, Connecticut. At 0212, the PIC of N220KC contacted Bradley Approach Control and advised that they were at 5,000 feet. The controller advised N220KC to expect the LDA (Localizer Directional Aid) to runway 02 and issued the last weather observation for Brainard which was taken at 2345. At 0216, the controller issued a heading for a radar vector to the LDA final approach, and then instructed N220KC to descend to 2,500 feet.

According to the cockpit voice recorder (CVR) transcript, the crew completed an approach briefing at 0213. The time from the final approach to the missed approach point, and the planned approach speeds were not discussed.

Page 3 of 12 NYC93FA159

After being issued the descent to 2,500 feet the PIC completed the descent checklist items at 0218. The last two items on the checklist, crew briefing, and calculations of the landing weight and the approach reference speed, were not discussed.

At 0218:48, the controller issued N220KC the approach clearance and a final heading to intercept the localizer course. The PIC of N220KC acknowledged the clearance.

During the next 2 minutes the SIC requested progressive flap settings, which the PIC accomplished. The SIC stated at 0220:36, "crossing Lomis," which was the final approach fix.

Over the next minute, communications between the SIC and PIC consisted of a request for a 3/4 flap setting, power adjustments, course alignment, confirmation of the minimum descent altitude and an adjustment of sink rate. The PIC reported to the SIC at 0221:58, "okay, keep her coming down Gary, there's the runway." At that point the SIC stated, "alrighty, my power, landing flaps."

There was no recording on the CVR that a before landing checklist readout was discussed or accomplished.

At about 0222, the PIC called the Bradley Approach Controller and cancelled their IFR flight plan and indicated that they were clear of the clouds at 1,100 feet. The controller acknowledged the cancellation and advised N220KC to "squawk VFR" on their transponder.

After the cancellation with Bradley, a company airplane transmitted on the airport UNICOM frequency and inquired if N220KC was on that frequency. The PIC of N220KC stated, "Yeah Bob, we're...getting ready to touch down." A request for weather information was made by the company airplane, and the PIC of N220KC requested that they standby.

A fast metallic grinding noise was heard on the CVR at 0223:45, followed by a sound similar to that of a loud metallic impact.

The following is an excerpt of the Cockpit Voice Recorder transcript, starting at 0222:48:

```
0222:48 PIC Okay speeds are (good).
```

0222:49 SIC Good, Good, Good.

0222:50 PIC Looking good, looking good.

0222:54 PIC Yeah, we're at ref plus fifteen..ref plus ten..plus ten..plus ten..plus ten..plus fifteen.

0223:11 PIC Ref.

0223:39 SIC Yeah we're good, we're good.

0223:44.5 [sound similar to that of fast metallic grinding]

0223:45.0 [sound similar to that of loud metallic impact]

0223:45.8 SIC What was that?

0223:46.2 [sound similar to that of fast metallic grinding]

o223:46.6 [sound similar to that of loud metallic impact]

0223:47.0 [sound similar to that of decrease in prop RPM]

Page 4 of 12 NYC93FA159

```
o223:47.8 SIC The # [expletive deleted] gear.
o223:49.0 SIC Is it down?
o223:50.0 PIC Yeah gear's down.
o223:51.0 SIC No it's up.
o223:52.7 SIC Give me some power, give me some power.
o223:53.5 PIC Gear's down.
o223:54.8 SIC It's up.
o223:55.3 PIC #
o223:56.7 SIC Give me some power there Scotty.
o223:59.3 SIC Give me some power (we're going below)
o224:00.2 PIC It's indicating up, it's ind-...#.
o224:02.5 SIC Give me some power, give me some-
o224:08.1 PIC #
o224:11.3 SIC Give me some power.
```

Similar interaction between the SIC and PIC continued for the next 12 seconds, followed by a sound similar to that of the stall warning horn at 0224:20.1. The CVR tape ended at 0224:26.3

Two witnesses located at a power plant, 1/2 mile north of the airport, observed N220KC in an approximate 80 to 90 degree left bank, 100 feet above the Connecticut river. They stated that the airplane passed close to a barge unloader which is a crane approximately 125 feet high, with a boom that extends about 30 feet out over the water. The witnesses observed the airplane descend behind a stone wall, and heard the airplane impact the water.

One witness who observed the airplane stated:

"Jeff and I were walking towards the Transfer Building and noticed a plane out of control. It just missed the barge unloader and the wings were in a vertical position...the engines sounded way off. We immediately ran inside and called control room-emergency...When we went back out all we saw was the tail of the plane sticking out of the water. It stayed there for about 10 minutes and then went under."

The airplane struck the water approximately 1,000 feet beyond the barge unloader. It was submerged in 25 feet of water about 30 feet from the shore, directly in front of a power plant water intake tunnel.

The accident occurred during the hours of darkness at approximately 41 degrees, 45 minutes north latitude, and 72 degrees, 39 minutes west longitude.

#### PILOT INFORMATION

#### PILOT IN COMMAND:

The Captain, J. Scott Cobble, held an Airline Transport Pilot Certificate for airplane multiengine land and was type rated in the Shorts SD-3. He also held a Commercial Pilot Certificate with ratings for airplane single engine land, rotorcraft helicopter, and instrument

Page 5 of 12 NYC93FA159

helicopter. Additionally, he held a Flight Instructor Certificate for airplane single and multiengine land and instrument airplane.

His most recent Federal Aviation Administration (FAA) First Class Medical Certificate was issued on July 31, 1993.

Mr. Cobble was hired by ASI in May 1989, where he flew as a second in command in the King Air BE-100 and BE-200. By March 1990, he had been upgraded to Captain in the King Air aircraft. He received both his initial qualification training and certification as a PIC, in the Swearingen SA-226, in September 1990. Mr. Cobble was approved by the FAA's Principal Operations Inspector for ASI, as a company check airman effective January 1993, in the SA-226. His last company Airmen Competency/ Proficiency Check in the SA-226 was on October 26, 1992.

Mr. Cobble had accumulated approximately 4200 hours of flight time of which about 600 hours were in this type of airplane. During the previous 90 days, Mr. Cobble had flown as a crewmember in six different types of airplanes to include the Shorts SD-3, the King Air 90, 100 and 200, a Piper PA-23 and the SA-226.

#### SECOND IN COMMAND:

The Second In Command, Gary B Payne, held a Commercial Pilot Certificate with ratings for airplane single and multiengine land, and instrument airplane. His most recent Federal Aviation Administration (FAA) First Class Medical Certificate was issued on February 1, 1993.

Mr. Payne was hired by ASI in 1991. He flew as an SIC in the King Air, the Shorts SD-3 and the SA-226. His last company Airmen Competency/Proficiency Check in the SA-226 was on June 23, 1993.

Mr. Payne had accumulated approximately 2690 hours of flight time, of which about 586 hours were the SA-226. During the previous 90 days, Mr. Cobble had flown as a SIC in four different types of airplanes.

#### WRECKAGE INFORMATION

The airplane wreckage was located submerged in approximately 25 feet of water, about 30 feet off the shore of the Connecticut River, directly in front of a power plant water intake pipe. The airplane came to rest inverted in the water on an approximate magnetic bearing of 090 degrees. The salvage divers reported, prior to rigging the airplane for removal, they observed the landing gear extended and the flaps appeared to be fully down.

The wreckage was removed from the water and examined on August 19, 1993. Examination of the wreckage revealed that all major components of the airplane were accounted for at the scene.

The fuselage hull from the wings aft was intact, with tears and fractures in the sheet metal in the vicinity of the wings. On the bottom of the fuselage a scrape mark, with a piece of sheet metal missing, was observed approximately nine feet forward of the tail, where the fuselage starts to curve and tapper. A piece of sheet metal was found on the runway about 3300 feet down from the approach end of runway 02. The sheet metal was painted white on one side and had green chromate on the other side.

The forward 15 feet of the fuselage nose section was compressed aft, and to the right, toward the number two engine. The nose section and the cockpit area was ripped open on the left side

Page 6 of 12 NYC93FA159

and destroyed. The wings were canted with the left angled aft about 45 degrees, and the right angled forward about 45 degrees. The leading edges of both wings were curled down and aft. The sheet metal of both wings was compressed and torn. The wing tips of both wings were twisted/rotated downward approximately 80 degrees.

The landing gear was extended and the flaps were at an approximate 30 degree setting. The control cables were examined for continuity. The cables were found broken at the bow-tie at the center section of the fuselage. From that point outward, control continuity was established from the cockpit to the rudder, elevator and ailerons.

The fuel tanks were ruptured and were absent of fuel.

The left engine was attached to its wing section and showed no visible signs of failure. The engine would not rotate by hand. No visible damage was observed to the first impeller stage. No foreign material was observed in the left engine intake area.

The right engine was found attached to its wing section and also showed no visible signs of failure. The right engine would not rotate by hand. There was visible soft blade bends, opposite the direction of rotation, in the first impeller stage. There was some foreign material visible in the right engine intake area.

The right propeller hub was attached to its respective engine. The blades of the right propeller hub were at an angle similar to that of a feathered position. One blade was curved opposite the direction of rotation.

The left propeller hub was attached to its respective engine and was found with the start locks engaged. The propeller blades were observed at a low blade angle similar to a flat pitch position. All three blades curved aft towards the wing section.

The tips of all propeller blades were sheared or broken off, with two to five inches missing from the ends of each. Pieces of metal similar to the missing propeller blade tips were found on and near runway 02, at the Hartford-Brainard Airport.

Multiple strikes were observed on the left side of runway 02, beginning 1820 feet from the approach end. The strikes extended for approximately 322 feet.

Multiple strikes on the right side of the runway center line began 1850 feet from the approach end of the runway and extended intermittently for about 350 feet.

The distance between the initial strikes, on both the left and right side of the runway, were measured at 19 inched apart. The last strikes on the right side of the runway measured 17 inches apart. The distance between the last regular strikes on the left side of the runway measured 56 inches apart. Intermittent strikes were observed on the left side for another 75 feet.

Numerous pieces of white paint chips were found on the runway in the vicinity of the strikes.

The cockpit voice recorder was recovered intact, and transported to the NTSB laboratory for analysis.

## MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on Mr. Scott Cobble and Mr. Gary Payne, on August 17, 1993, by Dr. Thomas F. Gilchrist, M.D., Associate Medical Examiner, Office of the Chief Medical Examiner, Farmington, Connecticut. The autopsy report stated that both died of "multiple

Page 7 of 12 NYC93FA159

blunt force injuries."

The toxicological testing report, from the FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma, revealed negative for drugs, carbon monoxide, cyanide and alcohol, for Mr. Cobble and Mr. Payne. However, Mr. Cobble showed a high positive for ethanol and acetaldehyde detected in the brain in the FAA report, and positive for ethanol in the brain in the autopsy report. The Human Performance Division of the NTSB reviewed the accident report data and attributed this to putrefaction.

#### ADDITIONAL INFORMATION

## Airplane Speeds:

According to a Garrett Engine Chart, a propeller speed of 2000 RPM with strikes 19 inches apart, computed to an airplane speed of 96 knots. Propeller strikes 17 inches apart computed to an airplane speed of 86 knots.

According to the FAA approved Airplane Flight Manual, the estimated approach speed for this airplane was 99 knots for the landing at HFD. The airplane placard stated that the minimum control speed (Vmc) was 94 knots.

## **Company Operations Procedures:**

According to the ASI Company Pilot Training Manual Standard Operating Procedures (SOP) the following procedures are to be utilized:

"Checklists - General, Checklists should be initiated by the pilot flying (PF). Good airmanship requires that, if in the opinion of the pilot not flying (PNF), initiation of the checklist has been overlooked, the PNF inquires of the PF if the checklist should be started. Such prompting is appropriate for any flight situation: Training, operations or check rides. In execution of the checklist, the PNF reads each checklist item aloud and the PF verbally responds to all checklist items (Challenge-Response). THERE WILL BE NO SILENT CHECKLISTS."

"Computation of the TOLD (take off and landing data) card, and approach and landing briefing should be accomplished during low workload, low traffic phases of flight."

"Approach Callouts and Procedures," states that prior to the Final Approach Fix (FAF) the PF will call for the "Before Landing Checklist," and the PNF would complete the before landing checklist, set the altitude alert, and heading bug for the missed approach procedure.

Crossing the final approach fix on a non-precision approach, the PNF calls "Final Approach Fix, next altitude is \_\_\_\_\_\_, Start timing, change nav radios as required."

According to the CVR factual report a before landing checklist was not called for or accomplished, and the PNF did not complete the required calls crossing the final approach.

### Landing Gear Warning Horn:

According the Swearingen Aviation Corporation specification book on the Metro SA-226, a safety switch is provided sensing scissor position to prevent inadvertent gear retraction on the ground, and a warning horn is provided which sounds if the throttles are closed with the gear in other than the down and locked position.

Page 8 of 12 NYC93FA159

On the SA-226, the only means to cancel the warning horn is to increase power, lower the landing gear, or pull the control circuit breaker eliminating electrical power to the horn. If a high rate of descent is desired, increasing power would not always maintain the high rate of descent. In the SA-226 the landing gear cannot be extended above 176 knots.

Beechcraft King Airs are equipped with a similar gear warning system; however, they have a silencing button which can cancel the warning horn. This allows the throttles to be brought to idle in flight for increased rates of descent from altitude. As a safety precaution on the King Airs, if the horn has been silenced and a flap position other than up is selected, the warning horn will re-sound and cannot be cancelled without lowering the landing gear, or increasing the power.

According to the ASI Director of Operations, previous to this accident, the warning horn circuit breaker on the SA-226 had been found out/popped during preflights in the morning. He stated that in the past crews had pulled the circuit breaker to silence the horn during rapid descents. The rapid descents were due to Air Traffic Control keeping the airplanes at a high altitude until very near the destination airport.

Interviews with ASI and La Guardia (LGA) Airport Operations personnel revealed that LGA was scheduled to close at 0100, August 17, 1993, for runway maintenance. N220KC departed the Atlantic City Airport at about 0010. According to the TRACON radar data N220KC arrived into their area at a cruising altitude of 4000 feet with a ground speed of 250 to 260 knots. When N220KC descended from 4000 feet to 2500 feet, it reached a maximum rate of descent of about 3200 feet per minute. The airplane arrived at LGA at approximately 0050, and departed LGA at 0100.

The maximum rate of descent reached during the later descent into Farmington, was 1440 feet per minute, with an average of 800 feet per minute.

### Previous Company Gear Up Landing:

In an interview with the Director of Operations for ASI, it was learned that he accidentally performed a gear up landing in a company Shorts SD-3, in February 1993, while conducting a training flight.

### FAA Principal Operations Inspector:

Mr. Norman Molitor of the FAA Flight Standards District Office has been assigned the duty of the Principal Operations Inspector for ASI for about 3 years. He has conducted several surveillance, operations, proficiency, competency checks of the ASI operations. Mr. Molitor conducted evaluations of the PIC, Scott Cobble, and on January 27, 1993, and approved Mr. Cobble as a check airman to conduct proficiency and line checks of ASI pilots, in the SA-226.

During a discussion on August 17, 1993, Mr. Molitor stated that he has given four check rides in N220KC. Two were from the jump seat, which is the number one passenger seat, and two were from the airplane's right seat. When asked about the gear warning system, Mr. Molitor stated that he was not familiar with the system. He stated that he was not qualified in the SA-226.

#### **CVR Information:**

At 0223:47.0, a sound similar to that of a decrease in propeller RPM was heard on the CVR tape. During the balance of the CVR tape the remaining engine noises were constant through

Page 9 of 12 NYC93FA159

the end of the tape.

Wreckage Release:

The airplane wreckage was released on August 19, 1993, to Scott Anglin, of Dawn Aeronautics, Inc., a representative of the owners insurance company.

## **Pilot Information**

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	29, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	01/30/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4200 hours (Total, all aircraft), 600 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 186 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft and Owner/Op	erator information		
Aircraft Make:	SWEARINGEN	Registration:	N220KC
Model/Series:	SA-226-TC SA-226-TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	TC-231
Landing Gear Type:	Retractable - Tricycle	Seats:	21
Date/Type of Last Inspection:	07/27/1993, Continuous Airworthiness	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	26 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	16710 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed, not activated	Engine Model/Series:	TPE-331-3U
Registered Owner:	AVIATION SERVICES INC.	Rated Power:	940 hp
Operator:	AVIATION SERVICES INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)

Page 10 of 12 NYC93FA159

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	EHT, 48 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	0200 EDT	Direction from Accident Site:	50°
Lowest Cloud Condition:	Scattered / 800 ft agl	Visibility	2.5 Miles
Lowest Ceiling:	Broken / 1500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 16°C
Precipitation and Obscuration:			
Departure Point:	FARMINGDALE, NY (FRG)	Type of Flight Plan Filed:	IFR
Destination:	(HFD)	Type of Clearance:	IFR
Departure Time:	0200 EDT	Type of Airspace:	Airport Advisory Area; Class E

## **Airport Information**

Airport:	HARTFORD-BRAINARD (HFD)	Runway Surface Type:	Asphalt
Airport Elevation:	19 ft	Runway Surface Condition:	Wet
Runway Used:	2	IFR Approach:	LDA
Runway Length/Width:	4418 ft / 150 ft	VFR Approach/Landing:	Go Around

## Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Page 11 of 12 NYC93FA159

## **Administrative Information**

ROBERT Investigator In Charge (IIC): L PEARCE Report Date: 09/20/1994 KARL F PFITZER; PHOENIX, AZ **Additional Participating Persons:** MARIO H BUENROSTRO; SAN ANTONIO, TX JOSEPH COSTA; WINDSOR LOCKS, CT BRIAN MILLETTE; HARTFORD, CT 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 pubing@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.