NATIONAL TRANSPORTATION SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594

Specialist's Factual Report

November 16, 2006

OPERATIONAL FACTORS

A. ACCIDENT

Location:	Manhattan, New York
Date:	October 11, 2006
Time:	1442 Eastern Daylight Time
Aircraft:	Cirrus Design SR-20
NTSB Number:	DCA07MA003

B. OPERATIONAL FACTORS STAFF

Specialist:	Robert Gretz National Transportation Safety Board Northeast Regional Office Parsippany, New Jersey

C. SUMMARY

On October 11, 2006, about 1442 eastern daylight time, a Cirrus Design SR-20, N929CD, crashed into an apartment building while maneuvering above Manhattan, New York. The airplane was destroyed by impact forces and a post crash fire. The certificated private pilot owner of the airplane, and a certified flight instructor were fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the flight that departed Teterboro Airport (TEB), Teterboro, New Jersey. The personal sightseeing flight was conducted under the provisions of 14 Code of Federal Regulations Part 91.

The Operations Specialist responded to the accident site on October 11, 2006, and collected data pertaining to the private pilot and flight instructor. During the investigation, Federal Aviation Administration (FAA) records were reviewed, the private pilot's logbook was examined, and the flight instructor's training records were reviewed. In addition, witnesses were interviewed, which included friends, family members, and fellow pilots.

D. DETAILS OF THE INVESTIGATION

HISTORY OF FLIGHT

Review of radar and communication data from the FAA, revealed that the pilots of N929CD requested a VFR departure from Teterboro Clearance Delivery at 1404, with the intention of flying over the Hudson River. The flight was given a transponder code of 0312, and a VFR clearance to remain outside the Class B airspace. The flight then departed Teterboro Airport at 1429, and proceeded southeast to the Hudson River, between 600 and 800 feet msl. The airplane flew south over the Hudson River at 500 feet msl, and at 1433, the transponder code was changed to 1200. Air Traffic Control (ATC) did not receive any further communications from the flight.

At 1436, the flight proceeded around the west side of the Statue of Liberty, and then north over the East River between 500 to 700 feet msl.

Further review of radar data revealed that the airplane was flying over the East River, on the east side of Roosevelt Island, prior to initiating a left 180-degree turn. The lateral clearance from the east bank of the East River, to the building, was approximately 2,100 feet. The airplane did not begin the left turn at the east bank of the river, but rather approximately 400 feet to the west and over the river. In addition, the reported surface wind in Central Park, at 1451, was from 060 degrees at 6 knots.

NEW YORK CITY CLASS B EXCLUSIONS (VFR CORRIDOR)

New York City is surrounded by overlapping Class B airspace from LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport. Due to a Class B Exclusion, aircraft can proceed around Manhattan, over the Hudson and East River, without coordination with ATC. The exclusion airspace is Class G up to 700 feet, and then Class E.

Aircraft must stay below 1,100 feet msl from approximately the George Washington Bridge over the Hudson River, counterclockwise, to approximately the north tip of Roosevelt Island over the East River (except for an area at the south tip of Manhattan where 1,500 feet is allowed). While flying over the East River, an aircraft would penetrate the LaGuardia Airport Class B airspace if it climbed above 1,100 feet, or traveled north of Roosevelt Island, or over Manhattan, or over Queens.

Although no ATC coordination is required, common traffic advisory frequencies are in place for the New York City VFR Corridor; the frequency 123.05Mhz is used for the Hudson River, and 123.075Mhz is used for the East River. Review of a current New York VFR Terminal Area Chart revealed that

pilots are instructed to self announce on those frequencies due to a high density of uncontrolled helicopter and fixed wing traffic; however, the self announcements are not mandatory.

PRIVATE PILOT/OWNER

Mr. Cory F. Lidle, age 34, obtained an FAA Third Class Medical Certificate, with no waivers or limitations, on November 18, 2005. Mr. Lidle received a private pilot certificate on February 9, 2006, with a rating for airplane single engine land. Review of his FAA airman file and medical records did not reveal any discrepancies or enforcement actions.

Mr. Lidle purchased N929CD on June 9, 2006. According to his pilot logbook, Mr. Lidle received flight instruction in a Cirrus SR-22 on July 11, 12, and 13, 2006. Mr. Lidle's first flight in N929CD was July 20, 2006, with an instructor. Mr. Lidle then flew the airplane on July 24, 2006, without an instructor, and there are no further entries in his pilot logbook.

According to his pilot logbook, Mr. Lidle's flight experience was:

Total Flying Time	**87.8 hours**
Total PIC Time	**48.0 hours**
Total Time in Cirrus SR-22/SR-20	**8.6 hours/ 3.9 hours (12.5 total in Cirrus)**
Total PIC Time in This Airplane	**3.9 hours**
Total Flying Time Last 24 Hours	**0.0 hours**
Last 30 Days	**0.0 hours**
Last 90 Days	**13.7 hours**
Last 12 Months	**87.8 hours**
Cross Country	**30.7 hours**
Dual Received	**55.5 hours**

Mr. Lidle was employed as a professional baseball player, and utilized several different flight instructors, depending on where he temporarily resided. From the time he received his private pilot certificate, until the time of the accident, Mr. Lidle flew with six different flight instructors, including the flight instructor involved in the accident. The majority of his flying had been conducted in California. There was no record of Mr. Lidle previously flying the VFR Corridor around New York City. He had received a total of 11.5 hours dual instruction in Cirrus aircraft.

Interviews were conducted with the five other flight instructors, including two that provided instruction in a Cirrus aircraft. Four of the flight instructors reported that Mr. Lidle's abilities were average, or as expected, for a pilot of his experience. Mr. Lidle was described as quick to adapt, conscientious, and checklist-oriented. The fifth instructor, who provided instruction in a Cirrus SR-22 on two occasions, stated that Mr. Lidle was "one of the better pilots" he had flown with, and flew "extremely well" for a pilot with his experience.

PASSENGER/FLIGHT INSTRUCTOR

Mr. Tyler C. Stanger, age 26, obtained his most recent FAA Second Class Medical Certificate on June 15, 2004, with no waivers or limitations. Mr. Stanger held a commercial pilot certificate, with ratings for airplane single engine land, airplane multi-engine land, and instrument airplane. He also held a flight instructor certificate, with ratings for airplane single engine land, and instrument airplane. Mr. Stanger first obtained his private pilot certificate on March 14, 1998.

In addition, Mr. Stanger held a ground instructor certificate, and an airframe and powerplant certificate. Review of his FAA airman file and medical records did not reveal any discrepancies or enforcement actions. One failure was noted on an aviation mechanic knowledge test, dated August 30, 2002.

Mr. Stanger had predominately flown in California, and his pilot logbook was not recovered. There was no record of Mr. Stanger previously flying over the East River, via the VFR Corridor. Three friends reported that Mr. Stanger previously flew Cirrus aircraft, but they did not know how many total hours he had accumulated in Cirrus aircraft. Mr. Stanger did not complete the Cirrus Standardized Instructor Program; however, there was no FAA requirement to complete the program before providing instruction. The program was an accreditation from the airplane manufacturer.

A friend of Mr. Stanger reported that shortly before the accident flight, Mr. Stanger telephoned him and stated that he was planning to fly over the Hudson River and around the Statue of Liberty, before beginning a cross-country flight to Lancaster, Pennsylvania. Lancaster was the first planned stop on the ferry flight to California. They briefly discussed the VFR Corridor as the friend had flown through it on prior occasions, but there was no discussion of the East River. The friend further stated that Mr. Stanger had not been to New York City before, nor had he flown the VFR Corridor before.

Another friend recalled that Mr. Stanger mentioned ferrying an airplane from the New York City area, several years prior to the accident flight. Mr. Stanger had stated that he flew around the Statue of Liberty during that flight, but never mentioned flying over the East River.

On August 10, 2006, Mr. Stanger attended a training academy in Florida, for instruction pertaining to the Piper Meridian. On his pilot data form, Mr. Stanger noted the following flight experience:

Total Flying Time	**2500 hours**
Total Multi-engine Time	**250 hours**
Total Instrument Time	**600 hours**
Total Turbine Time	**350 hours**

Total Flying Time	**Last 30 Days**	**20 hours**
	Last 90 Days	**75 hours**
	Last 12 Months	**400 hours**
Total Time in Type (Piper Meridian)		**20 hours**

24-HOUR HISTORY

According to family and friends, the Lidle and Stanger families were touring New York City during the days preceding the accident. On Tuesday, October 10, 2006, both families dined at a restaurant and attended a Broadway musical. Both families retired to a hotel for the evening. During the morning of the accident, Cory Lidle and Tyler Stanger assisted their respective families in preparation for their return trip to California, via commercial airline. During that time, at 1022, Mr. Lidle telephoned the fixed based operator that hangared his airplane at Teterboro Airport, and informed them that he would be approximately 90 minutes later than his planned arrival time of 11:00. Mr. Lidle and Mr. Stanger then arrived at Teterboro Airport about 1230, for the accident flight.

Prior to the accident flight, an employee at the fixed based operator observed Mr. Lidle and Mr. Stanger obtaining weather data from a computer, and planning a trip. She also observed Mr. Lidle perform a thorough preflight inspection of the accident airplane. The employee added that prior to Mr. Lidle's arrival, the airplane was "topped off" with the addition of 25 gallons of 100LL aviation gasoline, per Mr. Lidle's request.

WEIGHT AND BALANCE

The airplane was fueled to capacity prior to departure. Both pilots reported their weight as 196 pounds on their most recent FAA medical certificates. According to a representative at the fixed based operator, two large bags and some smaller bags were loaded on the airplane. The large bags were assumed to be 40 pounds each, and two smaller bags were assumed to be 20 pounds each. The bags were also assumed to have been secured in the baggage compartment.

A review of a Cirrus SR-20 Information Manual revealed that the maximum gross takeoff weight was 3,000 pounds, with a requirement that any weight above 2,900 pounds be fuel. Given the assumed conditions, the gross takeoff weight for the accident flight was estimated to be 2,984 pounds. The center of gravity was estimated to be slightly aft of the center of the flight envelope.

PERFORMANCE

Further review of the Information Manual revealed that the flaps-up stall speed was 64 knots indicated airspeed, at 3,000 pounds gross weight, engine idle, with a most aft center of gravity. Under the same conditions, the stall speed was 76 knots indicated airspeed at 45 degrees of bank, and 90 knots indicated airspeed at 60 degrees of bank.

E. LIST OF ATTACHMENTS

Attachment 1 – Interview Summaries

Attachment 2 – Pilot Logbook

Attachment 3 – Flight Instructor Training Record

Attachment 4 – Weight and Balance Data

Attachment 5 – Fueling Record

Attachment 6 – Weather Report

Attachment 7 – Toxicological Reports