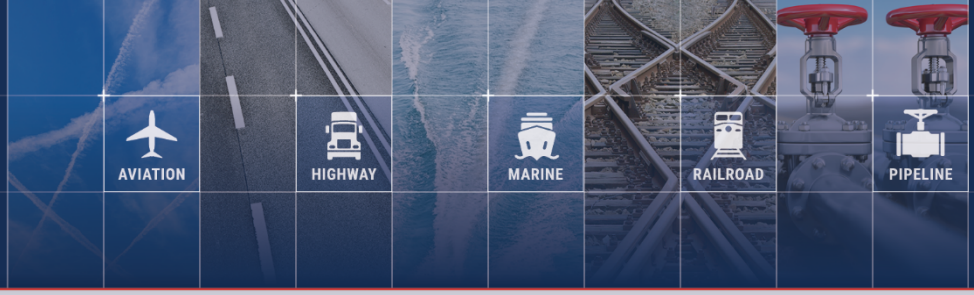

Aviation Investigation Final Report

Location:	SANTA MONICA, California	**Accident Number:**	LAX94FA058
Date & Time:	November 26, 1993, 10:42 Local	**Registration:**	N126MJ
Aircraft:	SIAI-MARCHETTI F-260	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The student pilot contacted a qualified commercial pilot and asked if he would fly with him. The first pilot declined, but the student's instructor was available. The aircraft departed westbound and the pilot requested approval from the tower to do a couple of 360-degree turns over the Santa Monica Pier. The tower observed the airplane at 800 feet msl in a left turn. Shortly thereafter, the airplane crashed into a residential area about 2 miles from the airport. Witnesses observed the airplane about 800 feet msl in steep-banked yawing left turns when it abruptly descended. The airplane was over gross weight by about 90 pounds and about 1 inch aft of the most rearward allowable CG.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the dual student pilot's failure to maintain minimum air speed in flight which resulted in an inadvertent stall/spin. Contributing to the accident was the improper weight and balance, inadequate altitude, and inadequate supervision.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Findings
1. TERRAIN CONDITION - RESIDENTIAL AREA

2. (F) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
3. (F) ALTITUDE - INADEQUATE - PILOT IN COMMAND(CFI)
4. (F) AIRCRAFT WEIGHT AND BALANCE - IMPROPER - PILOT IN COMMAND(CFI)
5. (C) AIRSPEED(VS) - NOT MAINTAINED - DUAL STUDENT
6. (C) AIRCRAFT CONTROL - NOT MAINTAINED - DUAL STUDENT
7. (C) STALL/SPIN - INADVERTENT - DUAL STUDENT

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On November 26, 1993, about 1042 hours Pacific standard time, a Siai-Marchetti F-260, N126MJ, was destroyed during a collision sequence with telephone lines, trees, and an apartment building in a residential area of Santa Monica, California. Visual meteorological conditions prevailed for the personal flight and no flight plan was filed. The ATP rated instructor pilot succumbed to his injuries 15 days after the accident. The student rated pilot and the third seat passenger were both fatally injured. The flight originated at the Santa Monica airport at 1037 as a local area flight.

According to the airplane owner who had flown the airplane on the morning of the accident, the student pilot had permission to fly the accident airplane with a pilot/instructor.

On the morning of the accident, the student pilot contacted a Siai Marchetti qualified pilot and stated to the pilot that he had a friend in town and would like to take him for a pleasure flight and would he be interested. The pilot declined. The pilot did state that the accident pilot/instructor was qualified in the airplane and he estimated that he had about 30 hours in type.

The pilot requested a takeoff on runway 03 with a left down wind departure. At 1037:32 the airplane was cleared for takeoff. Shortly after the departure, at 1039:54, the pilot requested permission to do a couple of 360-degree turns over the Santa Monica pier. The Santa Monica Air Traffic Control Tower approved the request at 1040:00. Tower personnel observed the aircraft on their D-BRITE radar at approximately 1041:00, circling the pier at 800 feet mean sea level in a left turn. There was no other radio or visual contact with the aircraft. At approximately 1042:00, the tower observed smoke in the general area of the aircraft and attempted radio contact twice.

Witness number one stated that, at approximately 1040:00, she was in her kitchen at 2224 Fourth Street, when she heard the sound of the engine from the aircraft she is learning to fly. She went outside with her husband to show him the aircraft. They located the aircraft in the sky flying straight and level in a westerly direction. She waved, but the pilot did not acknowledge. The plane then circled and after the plane completed its turn it quickly began to descend. Her husband saw the same thing with the exception that he saw the wings of the plane wobble as it came out of the turn, and then descend.

Witness number two is a pilot familiar with the Santa Monica Airport traffic pattern. He was at his residence about 1 1/2 miles west of the airport at 1336 Cedar Street. He stated that at approximately 1045:00, his attention was drawn to an aircraft in high rpm (engine revolutions per minute) in a left turn. This plane was to the southwest of his location. When he first saw the plane, it was heading north-northeast in a 30-to 35- degree bank to the left. The plane was

yawing badly to the right with a nose-high and tail-low attitude. He also noted the aircraft's low altitude, estimated to be 700 to 800 feet.

Witness number three was driving northbound. He observed the aircraft in a slight climb attitude above Lincoln Boulevard headed towards the ocean. Moments later, he observed the aircraft make a sharp left turn near the coast with an approximate 45-to 50-degree bank. One-quarter into the turn, the aircraft started a steep descent continuing its turn. The aircraft did not recover.

Witness number four was driving south on Fourth Street. At approximately 200 yards before the intersection of Pico Boulevard and Fourth, and 300 yards from the point of final impact, he saw the aircraft heading east approximately 150 feet above the ground, then turning north at approximately 90 miles per hour heading towards his vehicle. He reported that the propeller was turning as the aircraft lost altitude. He described the aircraft as slipping from side-to-side like a floating sheet of paper, as it descended. He stated that the tail struck the power lines and then continued across the street intersection.

Prior to departure, the aircraft had been fueled with 25.6 gallons of 100LL aviation fuel, topping both main fuel tanks with 5 gallons placed into each tip tank.

PERSONNEL INFORMATION

RIGHT SEAT PILOT

The pilot who occupied the right front seat held an airline transport pilot certificate and was rated for airplane single- and multiengine land. The pilot was also a certified flight instructor rated for single- and multiengine airplanes and instruments. The pilot was a rated advanced ground/instrument instructor.

At the pilot's last second-class flight physical conducted on October 18, 1993, he reported a total flight time of 5,000 hours, with 800 hours in the last 6 months.

Limited logbook information was obtained from the instructor pilot's representative. The copy of a pilot's log that was obtained began with an entry on January 14, 1992, and ended with an entry dated February 3, 1993. The last page that had been totaled was dated August 25, 1992. There were no entries for the accident type airplane nor were there multiengine aircraft entries.

According to the airplane owner, the instructor pilot had flown a total of 15.25 hours of dual flight with him. In addition, there were about 3 hours that were not signed off as dual instruction that they had flown together.

LEFT SEAT PILOT

The student pilot who occupied the left front seat had accumulated about 39 hours of flight

time according to a logbook recovered at the accident site, with about 8 hours of that as solo flight. One of the dual flight entries in the logbook had been in the accident airplane on February 19, 1993. This was a complex aircraft introduction and cross-country flight which lasted 1 1/2 hours.

AIRCRAFT INFORMATION

According to records recovered during the investigation, the last documented annual inspection was conducted on January 8, 1993. At that date, the entry stated that the total airframe flight time was 5,079.5 hours.

According to the records, the engine at the annual inspection had accumulated 1018.4 hours since a major overhaul with 3,352.4 hours since new. Since the annual inspection, the airplane had flown about 98 additional hours.

A postcrash examination of the airplane and the engine was conducted at a storage facility in Long Beach, California. The entire airplane was accounted for at the accident scene. During the course of the postcrash examination, no evidence was found of any control system failures or malfunctions.

During the postcrash examination, the fuel selector was found to be selected to the left main fuel tank. The magneto switches were found selected to both with the ignition key broken off. The master and alternator switches located next to the magneto switches were found in the off position. The alternator out warning light element was found broken. The landing gear selector switch was found in the down position. The landing gear warning/transit light revealed element stretch.

According to the Federal Aviation Administration (FAA) type certificate data sheet, the maximum gross weight for the accident airplane in the utility category is 2,430 pounds. At that gross weight, the data sheet lists the center of gravity (CG) foreword and aft range as 91.4 inches to 93.7 inches aft of the datum.

The weights of all three occupants of the airplane were obtained from the Los Angeles County Medical Examiners Office. The weight and balance data report for the accident airplane, dated October 16, 1991, was used in computing the empty weight and the CG range. According to the computations, the empty weight was 2,520 pounds and the CG was 94.7 inches aft of the datum.

AIRPORT INFORMATION

The Santa Monica Municipal airport is located about 3 miles east of the Santa Monica pier.

The accident flight departed on runway 03. The pilot requested a left downwind departure from the control tower, which was approved. The airports suggested operational procedures

lists a traffic pattern altitude of 1,400 feet msl for single-engine aircraft.

METEOROLOGICAL INFORMATION

At 1046 hours PST, the Santa Monica Air Traffic Control Tower was reporting; sky clear, visibility 50 miles, temperature 72 degrees fahrenheit, dew point 18 degrees fahrenheit, wind 360 degrees at 10 miles per hour and the altimeter was 30.19 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

The wreckage was located on the northwest corner of Bay and Fourth Streets in the city of Santa Monica. The main wreckage was located at the entrance to an apartment building underground garage, with the separated engine and other debris located inside the garage. Both horizontal stabilizers and elevators exhibited wire strikes and were severed from the airplane.

The initial contact/impact point was found to be with some trees about 30 feet above the ground. The wreckage path from 2009 Fourth Street to 325 Bay Street (the main wreckage) was measured to be 270-degrees magnetic over a distance of about 185 feet.

At the northwest corner of Bay and Fourth Streets, the severed left wing was located comingled with tree branches. All components of the wing were accounted for. Part of the left wing tip fuel tank was not located. Witnesses stated that part of the tip tank that was located underneath a vehicle had been removed by an unidentified person.

In the area of the left wing debris were located three propeller strikes in the asphalt driveway. The blade strikes were measured to be 20 and 23 inches apart. The first strike was measured to be 10 inches long. The second strike was measured to be 16 inches long and about 1/2 inch deep. The third strike was measured to be 40 inches long and 4 inches deep. A section of the propeller tip was found sheared from the blade and recovered in the wreckage area.

The fuselage and the right wing assembly was located at the end of the wreckage path. The tip fuel tank had collided with a vertical structural "I" beam of the garage support structure. The engine and propeller had separated and were located nearby. The right main fuel tank was still full of fuel. The right tip fuel tank was empty and fire damaged. The cockpit area had sustained postcrash fire damage.

MEDICAL AND PATHOLOGICAL INFORMATION

The right seat pilot, an FAA certified flight instructor, succumbed to his injuries on December 11, 1993. According to a family member, the pilot was unable to recall the accident during the period of hospitalization.

No toxicological samples were obtained from the right seat pilot prior to beginning his medical

treatment at the hospital.

The left seat student pilot was fatally injured at the time of the accident. On November 28, 1993, the Los Angeles County Medical Examiner performed an autopsy on the student pilot.

According to the results of the autopsy, the cause of death was attributed to multiple injuries. The Los Angeles County Medical Examiner also performed toxicological analysis on the student pilot. The results of the analysis were negative for drugs and alcohol.

In the opinion of the attending medical examiner:

"The fracture of two bones of the right forearm may indicate that the decedent was firmly gripping an object, for instance the plane yoke or wheel, at the time of his death. Such fractures may be seen in pilots and/or copilots. Supportive evidence would include fracture/dislocation of the thumbs which are lacking in this case. However, there is a stellate laceration in the web space between the thumb and the second finger of the right hand, and the second and fourth fingers of the right hand are dislocated. These may suggest, again, that the hand was firmly gripping an object like the yoke or wheel. The decedents location in the left front seat of the plane would also place him in a position to be either pilot or the copilot of the plane".

ADDITIONAL INFORMATION

On January 12, 1994, the wreckage was released to the claims representative of the insurance underwriters.

Pilot Information

Certificate:	Airline transport	**Age:**	40,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):		**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	October 18, 1993
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	5000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SIAI-MARCHETTI	**Registration:**	N126MJ
Model/Series:	F-260 F-260	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Aerobatic; Utility	**Serial Number:**	2-46
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	January 8, 1993 Annual	**Certified Max Gross Wt.:**	2430 lbs
Time Since Last Inspection:	98 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5171 Hrs	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	O-540-E4A5
Registered Owner:	KIETH D. HALSEY	**Rated Power:**	260 Horsepower
Operator:	ROY A. BELZER	**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SMO ,175 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	10:46 Local	**Direction from Accident Site:**	65°
Lowest Cloud Condition:	Clear	**Visibility**	50 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	22°C / -8°C
Precipitation and Obscuration:			
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	10:37 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	SANTA MONICA MUNICIPAL SMO	**Runway Surface Type:**	
Airport Elevation:	175 ft msl	**Runway Surface Condition:**	
Runway Used:	3	**IFR Approach:**	None
Runway Length/Width:	4987 ft / 150 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 Fatal	**Latitude, Longitude:**	34.019943,-118.470535(est)

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	JOSEPH P GERBINO; LOS ANGELES , CA CHARLES LITTLE; WILLIAMSPORT , PA RAY MYLLYLA; SANTA MONICA , CA
Original Publish Date:	October 20, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=28508