Aviation Investigation Final Report

Location:	LAWRENCE, Massachusetts	**Accident Number:**	NYC00LA199
Date & Time:	July 16, 2000, 15:00 Local	**Registration:**	N26080
Aircraft:	Grumman American AA-5A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During the cross-country flight, the airplane's radios become inoperative. Due to deteriorating weather conditions, the pilot decided to land at an alternate airport. The pilot approached the airport and observed the windsock before landing. He then entered the traffic pattern for Runway 32, and was 'high and fast' on final approach. A slip was initiated prior to the runway threshold; however, the airspeed did not decrease during the approach. The airplane touched down more than 1,950 feet from the approach end of the 3,901 foot long runway, bounced three times, and then the pilot added full power to abort the landing. During the aborted landing, the airplane yawed to the left, impacted a tree, and rolled inverted. The airplane came to rest at the base of the tree. The pilot had accumulated 1,165 hours of total flight experience in the accident airplane; however, in the past 3 years, the pilot had performed one flight on June 7, 1999. At 1454, the winds were reported from 110 degrees at 9 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to attain the proper touchdown point and his delayed remedial action. Also causal was the pilot's lack of recent experience. A factor in the accident was the tailwind condition.

Findings

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

Findings
1. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
2. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND
3. (C) LACK OF RECENT EXPERIENCE - PILOT IN COMMAND
4. (F) WEATHER CONDITION - TAILWIND

Factual Information

On July 16, 2000, about 1500 Eastern Daylight Time, a Grumman American AA-5A, N26080, was substantially damaged during an aborted landing at the Lawrence Municipal Airport (LWM), Lawrence, Massachusetts. The certificated private pilot sustained minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight conducted under 14 CFR Part 91. The flight originated at the Hampton Roads Airport (PVG), Portsmouth, Virginia.

According to the pilot, he departed from Craig Municipal Airport in Jacksonville, Florida, on July 14, 2000, destined for the Knox County Regional Airport (RKD), Rockland, Maine. He said it was an "extremely hot day," and the air temperature indicated 95 degrees. A new engine had recently been installed in the airplane, and the pilot had been "running the engine hard, to set the rings." The flight was conducted at an approximate altitude of 2,000 feet above the ground. As the pilot approached Charleston, South Carolina, one of the airplane's communication radios and both of the navigational radios failed. He continued the flight using the airplane's "Comm 1" radio and "Loran C"; however, soon after, both of these units failed. The pilot was unsure of his position, and decided to land at an airport "to find out where he was." He noticed an airport beneath him, entered the traffic pattern behind a twin-engine airplane, and landed at the airport. After he walked inside the airport terminal, the pilot determined that he was at the "Combs County Airport."

The pilot stated that he departed the "Combs County Airport," and used a "compass and pilotage" to fly to PVG. After he landed at PVG, a mechanic at the airport examined the airplane's radios.

The mechanic reported that when the airplane arrived, the radios were "too hot to touch". Once the radios cooled they were bench checked, and no abnormalities were noted. The radios were then reinstalled in the airplane, and the pilot purchased a portable Global Positioning System (GPS) from the company.

The pilot reported that the airplane was refueled to "2-3 inches below the top of the tank;" however, the flight was not continued that day because the weather was "not VFR." On the evening of July 15, 2000, the pilot contacted the Leesburg Flight Service Station and received a weather briefing for a departure on the morning of July 16, 2000. The weather was forecast to be "good to Long Island, IFR to the north, and forecasted low ceilings were expected to increase."

Around 1000 Eastern Daylight Time, on July 16, 2000, the pilot departed PVG destined for RKD, and flew "up the coast line" at 2,000 feet. One of the airplane's communication radios failed south of John F. Kennedy International Airport (JFK), New York, New York; however, the pilot

continued to communicate using the second communication radio. He flew "under the TCA veil at JFK," east over Long Island, and northeast over "the sound." A climb was initiated to 3,000 feet, and the pilot observed "good VFR towards Connecticut," and IFR weather to the north and east."

As the pilot proceeded towards RKD, the second communication radio failed, and he decided to "put the airplane down." While en route to the Hanscom Field Airport, Bedford, Massachusetts, the pilot noticed LWM and prepared for a landing there. He circled the tower three times; however, he did not observe any light signals. The pilot stated that he checked the wind sock at the airport, and entered the traffic pattern for Runway 05. The airplane was "high" on final approach, and a "full slip" was initiated "just before the threshold." The airplane's speed "seemed higher than 65 knots," which was indicated on the airspeed indicator, and the airplane was "moving faster than he should have been." After the airplane bounced several times on the runway, full power was applied, and the pilot aborted the landing. During the aborted landing, the airplane was "yawing to the left" when one wheel struck a tree, and initiated a "slow roll" of the airplane to the left. The airplane came to rest, upside down, at the base of the tree.

In a written statement, an air traffic controller who was working at LWM on July 16, 2000, reported the following:

"At approximately 1903Z, I noticed a low wing aircraft just coming out of the clouds near the numbers on runway 23, heading in a 'close-in' counter-clockwise orbit, around the airfield...The aircraft turned a close-in final for runway 32, and I gave the NORDO [no radio] aircraft light gun signals to land. As the aircraft came past the tower cab he appeared to be high and fast. The engine appeared to be on and normal in sound and pitch. At approximately midfield, the aircraft nosed down to the runway for landing."

The controller stated that the airplane bounced twice, and "went off the end of the runway into the trees." She reported that the airplane "pulled up briefly, banked left wing down, and [went] back into the trees."

A Federal Aviation Administration (FAA) inspector interviewed the pilot and witnesses after the accident. As a result of the interviews, he reported that the airplane touched down more than 1,950 feet from the approach end of Runway 32, a 3,901 foot long runway. The airplane bounced twice, and on the third bounce, the pilot applied full power for a go-around. The airplane banked toward the left, flew 1/4 mile over trees and wires, and stalled over the trees. The airplane hung in a tree inverted for a moment, then slid down the tree, and impacted the ground upside down on the bank of a river.

The FAA inspector examined the airplane on-site. According to the inspector, a section of both wings from the ailerons outward had broken off, and both fuel tanks had ruptured. The flaps and the flap selector were in the retracted position. The mixture control was in the full rich position, and the throttle control was in the idle position. The propeller blades were bent

backwards. The inspector reported that a new engine had just been installed on the airplane, and the pilot reported no problems with the engine.

The pilot reported 1,167 hours of total flight experience, of which 1,165 were in the accident airplane. In the past 3 years, the pilot performed one flight; a biannual flight review conducted on June 7, 1999. The pilot did not possess an instrument rating.

At 1454, the weather reported at LWM included: overcast skies at 800 feet, wind from 110 degrees at 9 knots, and visibility 10 statute miles.

Pilot Information

Certificate:	Private	**Age:**	69,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	June 4, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	1167 hours (Total, all aircraft), 1165 hours (Total, this make and model), 1062 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman American	**Registration:**	N26080
Model/Series:	AA-5A AA-5A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	AA5A0419
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 12, 2000 Annual	**Certified Max Gross Wt.:**	2200 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	4125 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-320
Registered Owner:	PRISCILLA SADLER	**Rated Power:**	150 Horsepower
Operator:	JOHN SADLER	**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	LWM ,148 ft msl	**Distance from Accident Site:**	
Observation Time:	14:54 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Unknown	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 800 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	110°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	23°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PORTSMOUTH (PVG)	**Type of Flight Plan Filed:**	None
Destination:	ROCKLAND (RKD)	**Type of Clearance:**	None
Departure Time:	10:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	LAWRENCE MUNI AIRPORT LWM	**Runway Surface Type:**	Asphalt
Airport Elevation:	148 ft msl	**Runway Surface Condition:**	Wet
Runway Used:	32	**IFR Approach:**	None
Runway Length/Width:	3901 ft / 100 ft	**VFR Approach/Landing:**	Go around

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Muzio, David
Additional Participating Persons:	RICHARD RHUDA; BEDFORD , MA
Original Publish Date:	May 8, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49702