Aviation Investigation Final Report

Location:	Wadsworth, Ohio	**Accident Number:**	NYC05LA092
Date & Time:	June 7, 2005, 12:30 Local	**Registration:**	N2148F
Aircraft:	Piper PA-44-180	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot was attempting a short-field takeoff on a 2,360-foot-long, asphalt runway. As the student pilot began the takeoff roll, the flight instructor reduced the right engine throttle to simulate an engine failure. The student pilot reduced the left engine throttle, and began braking. The flight instructor then instructed the student pilot to resume the takeoff. The flight instructor stated that the airplane accelerated normally to a rotation speed of about 63 knots. The student pilot indicated that the airplane was not lifting off, and the flight instructor elected to abort the takeoff. The airplane was about halfway down the runway, when the flight instructor retarded the throttle, propeller, and mixture controls, and began braking. He then realized the engines were still producing power. The flight instructor further stated that by the time he again reached for the engine controls, it was too late to stop. The airplane departed the end of the runway, rolled through a ditch, and came to rest in a field. Examination of the airplane did not reveal any mechanical malfunctions. Nor did the flight instructor report any.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to verify that the engine controls were completely retarded during an aborted takeoff, which resulted in a runway overrun.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ABORTED

Findings
1. TERRAIN CONDITION - DITCH
2. (C) POWERPLANT CONTROLS - NOT VERIFIED - PILOT IN COMMAND

Factual Information

On June 7, 2005, about 1230 eastern daylight time, a Piper PA-44-180, N2148F, was substantially damaged during an aborted takeoff from the Weltzien Skypark Airport (15G), Wadsworth, Ohio. The certificated flight instructor and a student pilot were not injured. Visual meteorological conditions prevailed and no flight plan was filed for the local instructional flight that was conducted under 14 CFR Part 91.

According to written statements, the student pilot was attempting a short-field takeoff from runway 21, a 2,360-foot-long, 37-foot-wide, asphalt runway. As the student pilot began the takeoff roll, the flight instructor reduced the right engine throttle to simulate an engine failure. The student pilot reduced the left engine throttle, and began braking. The flight instructor then instructed the student pilot to resume the takeoff, and the student pilot advanced both throttles forward.

The flight instructor stated that the airplane accelerated normally to a rotation speed of about 63 knots. The student pilot indicated that the airplane was not lifting off, and the flight instructor elected to abort the takeoff. The airplane was about halfway down the runway, when the flight instructor retarded the throttle, propeller, and mixture controls, and began braking. He then realized the engines were still producing power. The flight instructor further stated:

"By the time I again reached for the levers, it was too late to stop, and we skidded off the runway...."

The airplane departed the end of the runway, rolled through a ditch, and came to rest in a field.

Examination of the airplane by a Federal Aviation Administration inspector did not reveal any mechanical malfunctions. Nor did the flight instructor report any. In retrospect, the flight instructor said that instead of aborting the takeoff, he should taken control of the airplane from the student pilot, and positively rotated during the takeoff roll.

The flight instructor reported 2,043 hours of total flight experience, which included about 132 hours in the same make and model as the accident airplane. He also stated that at the time of the accident, the winds were calm, and the outside air temperature was 92 degrees Fahrenheit.

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	January 1, 2005
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	September 1, 2004
Flight Time:	2043 hours (Total, all aircraft), 132 hours (Total, this make and model), 1933 hours (Pilot In Command, all aircraft), 190 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	38,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	July 1, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	October 1, 2004
Flight Time:	900 hours (Total, all aircraft), 3 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N2148F
Model/Series:	PA-44-180	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	44-7995157
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 1, 2005 100 hour	**Certified Max Gross Wt.:**	3800 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	5926 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360
Registered Owner:	Skypark Inc.	**Rated Power:**	180 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	BJJ,1136 ft msl	**Distance from Accident Site:**	12 Nautical Miles
Observation Time:	12:53 Local	**Direction from Accident Site:**	200°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	280°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.97 inches Hg	**Temperature/Dew Point:**	31°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wadsworth, OH (15G)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	Weltzien Skypark 15G	**Runway Surface Type:**	Asphalt
Airport Elevation:	1210 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	31	**IFR Approach:**	Unknown
Runway Length/Width:	2360 ft / 37 ft	**VFR Approach/Landing:**	Unknown

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	41.028331,-81.798332

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	Sarah Davis; FAA Cleveland FSDO; Cleveland, OH
Original Publish Date:	October 3, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61640

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