



National Transportation Safety Board Aviation Accident Final Report

Location:	Bedminster, NJ	Accident Number:	ERA12CA204
Date & Time:	03/02/2012, 1800 EST	Registration:	N518F
Aircraft:	AMERICAN CHAMPION AIRCRAFT 7GCAA	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The flight instructor stated that he and the pilot receiving instruction were practicing traffic pattern work and had performed two simulated engine failures without incident before the accident. The flight instructor initiated a third simulated engine failure at a higher altitude than the previous two and suggested the pilot receiving instruction perform S-turns to lose altitude. During the maneuver, the airplane descended too low to complete a power-off landing to the runway, and the flight instructor told the pilot receiving instruction to perform a go-around. The flight instructor also reached for the throttle to add full power for the go-around, but the airplane abruptly pitched down and impacted the ground, substantially damaging the wings and fuselage. Postaccident examination revealed that the pitch trim control was in the full forward (nose-down) position.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot receiving instruction's inadvertent movement of the pitch trim control to the nose-down position while attempting a go-around.

Findings

Aircraft	Pitch control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)

Factual Information

History of Flight

Approach-VFR pattern final	Simulated/training event
Approach-VFR go-around	Attempted remediation/recovery Collision during takeoff/land (Defining event)

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	51, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Without Waivers/Limitations	Last Medical Exam:	03/05/2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/31/2010
Flight Time:	6804 hours (Total, all aircraft), 360 hours (Total, this make and model), 6519 hours (Pilot In Command, all aircraft), 265 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	01/22/2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	152 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AMERICAN CHAMPION AIRCRAFT	Registration:	N518F
Model/Series:	7GCAA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	5182009
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	09/29/2011, Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	273 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-B2B
Registered Owner:	Cinco de Flyo, LLC	Rated Power:	160 hp
Operator:	Cinco de Flyo, LLC	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SMQ, 105 ft msl	Observation Time:	1753 EST
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Dusk
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 2300 ft agl	Temperature/Dew Point:	5°C / 2°C
Lowest Ceiling:	Overcast / 2900 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 110°	Visibility (RVR):	
Altimeter Setting:	29.97 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bedminster, NJ (SMQ)	Type of Flight Plan Filed:	None
Destination:	Bedminster, NJ (SMQ)	Type of Clearance:	None
Departure Time:	1720 EST	Type of Airspace:	

Airport Information

Airport:	Somerset Airport (SMQ)	Runway Surface Type:	Asphalt
Airport Elevation:	105 ft	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	2733 ft / 65 ft	VFR Approach/Landing:	Go Around

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Brian C Rayner	Adopted Date:	02/14/2013
Additional Participating Persons:	Robert Ference; FAA/FSDO; Allentown, PA		
Publish Date:	02/14/2013		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=83025		

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