



National Transportation Safety Board Aviation Accident Final Report

Location:	Ray, MI	Accident Number:	CEN16LA017
Date & Time:	10/15/2015, 1810 EDT	Registration:	N224MS
Aircraft:	Comp Air Inc. (Plambeck) CA8	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The private pilot reported that, while on a left downwind in the airport traffic pattern after conducting a cross-country business flight, he extended the flaps 10 degrees. While on short final, he fully extended the flaps, and shortly after, the left wing dropped. The pilot attempted to correct the left wing drop by applying right aileron and rudder; however, the airplane did not respond. The pilot chose to conduct a go-around and increased engine power. The airplane subsequently pitched up, and the left turn steepened. The pilot subsequently reduced engine power, and the airplane began to descend. The airplane struck the ground short of the runway, and the left wing separated from the fuselage.

The examination of the airframe, flight controls, and engine revealed no preimpact mechanical anomalies that would have precluded normal operation. Examination of the trim system revealed that the right aileron trim and the left rudder trim were in positions that would have resulted in a right turn and a left yaw. Further, a witness reported that the airplane appeared to be in a cross-controlled attitude while on final approach to the airport. It is likely that the pilot's improper use of the trim led to a cross-controlled situation and resulted in the subsequent stall during the attempted go-around.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper use of the trim, which created a cross-controlled situation and resulted in an aerodynamic stall during the attempted go-around.

Findings

Aircraft	Performance/control parameters - Not attained/maintained (Cause)
Personnel issues	Use of equip/system - Pilot (Cause) Aircraft control - Pilot (Cause)

Factual Information

On October 15, 2015, about 1810 eastern daylight time, a Comp Air Inc. (Plambeck) CA8 experimental airplane, N224MS, was substantially damaged while landing at Ray Community Airport (57D), Ray, Michigan. The private pilot had minor injuries. Visual meteorological conditions prevailed at the time of the accident. The business flight was being conducted under the provisions of 14 Code of Federal Regulations Part 91 without a flight plan. The cross country flight departed Anniston Regional Airport (KANB), Anniston, Alabama, about 1315 central daylight time and was en route to 57D.

The pilot stated that while on a left downwind in the airport traffic pattern for runway 27, he extended 10 degrees of flaps. He completed a left base and extended full flaps while on a short final. Shortly after extending full flaps the left wing dropped. The pilot attempted to correct the left wing drop with right aileron and rudder; however, the airplane did not respond. The pilot elected to go around and increased engine power. The airplane pitched up and the left turn steepened. The pilot subsequently reduced engine power and with the resulting descent prepared for an impact with the ground. The airplane struck the ground short of the runway and the left wing separated from the fuselage. The pilot reported that the engine continued to run for about 15 minutes following the accident.

A Federal Aviation Administration inspector who responded to the accident established that the flight controls were free and correct and the flaps were completely extended. Further review and examination of the trim system revealed that the right aileron trim and left rudder trim were in positions consistent with a right turn and a left yaw. The examination of the airframe, flight controls, engine, and remaining systems revealed no mechanical anomalies that would have precluded normal operation prior to the accident.

The inspector interviewed a flight instructor who witnessed the accident. This witness reported that the airplane appeared to be in a cross controlled attitude or a skid while on final approach to the airport. The witness confirmed that it sounded as though there were several power changes during the final approach.

History of Flight

Approach-VFR pattern base	Loss of control in flight (Defining event) Collision with terr/obj (non-CFIT)
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Pilot Information

Certificate:	Private	Age:	46, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last FAA Medical Exam:	09/17/2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	01/21/2015
Flight Time:	948 hours (Total, all aircraft), 49 hours (Total, this make and model), 911 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Comp Air Inc. (Plambeck)	Registration:	N224MS
Model/Series:	CA8	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	0652843
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	11/09/2014, Condition	Certified Max Gross Wt.:	5600 lbs
Time Since Last Inspection:		Engines:	1 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	Walter
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	M601 EXP
Registered Owner:	Paul R and Pin A Boak	Rated Power:	657 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	KMTC, 579 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1855 EDT	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 12000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 20000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	14° C / 5° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anniston, AL (KANB)	Type of Flight Plan Filed:	IFR
Destination:	Ray, MI (57D)	Type of Clearance:	IFR
Departure Time:	1315 CDT	Type of Airspace:	Class G

Airport Information

Airport:	Ray Community Airport (57D)	Runway Surface Type:	Asphalt
Airport Elevation:	632 ft	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	2495 ft / 60 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	42.736667, -82.888889

Administrative Information

Investigator In Charge (IIC):	Jennifer Rodi	Report Date:	04/04/2016
Additional Participating Persons:	Lance E Morden; FAA FSDO; MI		
Publish Date:	04/04/2016		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92202		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).