



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Union, Illinois	Accident Number:	CEN18LA205
Date & Time:	May 27, 2018, 18:15 Local	Registration:	N19366
Aircraft:	Cessna 150L	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Glider tow		

Analysis

The airline transport pilot reported that he was returning from a routine glider tow flight when he thought "something was wrong." He noted that it seemed to "get dark" although there was plenty of daylight. The airplane was high on the approach. The pilot continued the flight inbound but was unsure of the airplane's exact altitude or airspeed as it crossed the runway threshold, and he did not recall verifying that the engine power was at idle. The airplane "bounced down the field" and he flew toward an opening in the trees off the end of the runway. The pilot did not see the power lines until the airplane struck them and then came to rest in a field. The pilot recalled not having an "aviation related thought" during the landing. A postaccident examination of the airframe and engine did not reveal any evidence of preimpact mechanical malfunctions or failures that would have precluded normal operation.

The pilot had completed the Federal Aviation Administration BasicMed medical certification, which was valid at the time of the accident. The pilot described symptoms consistent with fainting or nearly fainting, which commonly occur when blood pressure is low and would have led to an inability to safely fly the airplane. The pilot thought that dehydration or heat exhaustion might have caused his symptoms. However, given his long-standing paroxysmal atrial fibrillation, his difficulty effectively controlling it after the accident, his documented low blood pressure during those episodes, and his lack of symptoms during the episodes of atrial fibrillation other than "feeling bad," it is likely that his symptoms during the flight were related to an episode of atrial fibrillation associated with a rapid heart rate and low blood pressure. Therefore, symptomatic near fainting as a result of uncontrolled paroxysmal atrial fibrillation likely caused the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's medical impairment at the time of the accident, which resulted in a collision with power lines off the end of the runway.

Findings

Personnel issues	Cardiovascular - Pilot
Environmental issues	Wire - Contributed to outcome

Factual Information

History of Flight

Approach-VFR go-around	Collision with terr/obj (non-CFIT)
Approach-VFR go-around	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On May 27, 2018, about 1815 central daylight time, a Cessna 150L airplane, N19366, was substantially damaged during an in-flight collision with power lines and terrain after an attempted go-around at the Sky Soaring Airport (55LL), Union, Illinois. The pilot sustained serious injuries. The airplane was registered to and operated by Sky Soaring Inc. as a Title 14 *Code of Federal Regulations* Part 91 glider tow flight. Day visual meteorological conditions prevailed. The flight was not operated on a flight plan. The local flight originated from 55LL about 1800.

The pilot had completed five glider tow flights during the afternoon. He took a break about 1700 before completing two additional glider tow flights. The initial six tow flights were completed without incident. The accident flight was conducted to 2,000 feet and the glider released without incident.

The pilot recalled that during his return to the airport for landing "something was wrong." Although there was plenty of daylight, he stated that it seemed to "get dark." The airplane was high on the approach and he angled away from the runway to lose some altitude. He recalled continuing inbound but was unsure of the airspeed or altitude as the airplane crossed the threshold. He commented that there might have been some residual engine power on; however, he did not recall verifying that the throttle was at idle. The airplane was heading west into the sun and he aimed for an opening in the trees off the end of the runway. He did not see the power lines until it was too late. He recalled a "blue flash" and his next recollection was being treated by paramedics after the accident.

The pilot recalled not having an "aviation related thought" as the airplane "bounced down the field," and noted that heat exhaustion or dehydration might have been responsible. He added that he had not had such an event, where things seemed to "get dark," either before or since the accident. He did not perceive any issues with the airplane during the accident flight.

A witness reported that the pilot was returning from a glider tow flight at the time of the accident. The pilot had executed a go-around and was climbing out when the airplane impacted powerlines about 600 ft from the end of the runway.

The airplane came to rest upright in an agricultural field about 200 ft from the power lines. A postaccident examination of the airframe and engine did not reveal any anomalies consistent with a preimpact failure or malfunction.

A review of the pilot's medical records revealed that he had reported several medical conditions to the Federal Aviation Administration (FAA), including non-obstructive coronary artery disease, hypertension, and atrial fibrillation. After review of additional information, the FAA issued a special

issuance medical certificate with a requirement to wear distant vision corrective lenses and to have near vision corrective lenses available. The certificate was not valid for any class after June 30, 2013. The pilot had subsequently completed the requirements for certification under BasicMed on August 24, 2017. His BasicMed certification was valid at the time of the accident.

During his postaccident treatment for multiple traumatic injuries, the pilot developed episodes of recurrent atrial fibrillation associated with low blood pressure. He was unaware of any palpitations during the atrial fibrillation episodes but did "feel bad" which was thought to be related to the low blood pressure.

Pilot Information

Certificate:	Airline transport; Flight engineer	Age:	88, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	BasicMed With waivers/limitations	Last FAA Medical Exam:	May 27, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	17000 hours (Total, all aircraft), 300 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N19366
Model/Series:	150L L	Aircraft Category:	Airplane
Year of Manufacture:	1973	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15074368
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	May 12, 2018 Annual	Certified Max Gross Wt.:	1601 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	794.9 Hrs at time of accident	Engine Manufacturer:	Continental Motors
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	O-200-A
Registered Owner:		Rated Power:	100 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:	DKB,913 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	18:15 Local	Direction from Accident Site:	215°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.87 inches Hg	Temperature/Dew Point:	33°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Union, IL (55LL)	Type of Flight Plan Filed:	None
Destination:	Union, IL (55LL)	Type of Clearance:	None
Departure Time:	18:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Sky Soaring 55LL	Runway Surface Type:	Grass/turf
Airport Elevation:	884 ft msl	Runway Surface Condition:	Vegetation
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	3000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	42.154167,-88.51139(est)

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Douglas Lewis; FAA Flight Standards; Des Plaines, IL Andrew Hall; Textron Aviation; Wichita, KS
Original Publish Date:	November 19, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97375

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