

Aviation Investigation Final Report

Location: Ankeny, Iowa Accident Number: CEN20CA120

Date & Time: March 11, 2020, 16:45 Local Registration: N83032

Aircraft: Aeronca 7AC Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 1 Serious, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that he attempted to hand prop the engine numerous times without success. He returned to the cockpit and turned the magneto switch to the "off" position and advanced the throttle to between 1/2 and 3/4 travel. He then exited the cockpit and turned the propeller backward five to six "blades" to clear the cylinders. The pilot again returned to the cockpit and turned the magneto switch back to the "on" position, but he did not retard the throttle back to idle. He attempted to hand prop the engine again, and it started. Due to the engine's throttle setting, the airplane moved forward over the wheel chocks and struck the pilot, which resulted in serious injuries, and then a hangar, which resulted in substantial damage to the firewall and fuselage.

Probable Cause and Findings

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

The pilot's improper starting procedure, which allowed the airplane to move forward over the wheel chocks and impact him and a hangar when he subsequently hand propped the engine.

Findings

Personnel issues Use of equip/system - Pilot

Environmental issues Person - Effect on operation

Environmental issues Airport structure - Effect on operation

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Factual Information

History of Flight

Standing-engine(s) start-up	Loss of control on ground (Defining event)	
Standing-engine(s) operating	Collision with terr/obj (non-CFIT)	

Pilot Information

Certificate:	Private	Age:	65,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	None
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Unknown	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Aeronca	Registration:	N83032
Model/Series:	7AC No Series	Aircraft Category:	Airplane
Year of Manufacture:	1956	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7AC-1688
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	Vintage Flying Club	Rated Power:	
Operator:	Private Individual	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KIKV,910 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:35 Local	Direction from Accident Site:	155°
Lowest Cloud Condition:	Few / 3900 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	18 knots / 31 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	11°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	ANKENY RGNL IKV	Runway Surface Type:	
Airport Elevation:	909 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	N/A	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	41.695278,-93.568611(est)

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Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Daniel Michaelsen; FAA FSDO; Des Moines, IA
Original Publish Date:	August 3, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101069

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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