



Aviation Investigation Final Report

Location:	AUBURN, Washington	Accident Number:	SEA00LA191
Date & Time:	September 26, 2000, 09:50 Local	Registration:	N3954E
Aircraft:	Aeronca 11BC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot fueled the tail-wheel equipped Aeronca 11BC aircraft prior to a planned departure. The aircraft was not equipped with a parking brake, and the lack of an electric starter required hand propping to start the engine. The pilot secured the aircraft with a length of rope with one end connected at the aircraft's releasable tie-down tail hook, and the opposing end tied to a Chevron sign post. Initial attempts to start the aircraft with the throttle closed were unsuccessful, and the pilot then 'cracked' the throttle and hand propped the engine, which started immediately. The pilot reported that she 'saw the aircraft idling too fast and moving forward.' The rope then broke and the aircraft taxied into the metal barricades protecting the fuel pumps. The pilot reported that she carried chocks in the aircraft but had not used them at the time of the engine start.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to adequately secure the aircraft prior to a manual engine start. A contributing factor was the excessive throttle setting on start.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: TAXI

Findings

1. MISC EQPT/FURNISHINGS,AIRCRAFT TIE-DOWN(S) - SEPARATION
2. (C) TIE DOWN - INADEQUATE - PILOT IN COMMAND
3. MISC EQPT/FURNISHINGS,WHEEL CHOCKS - NOT ENGAGED
4. (F) THROTTLE/POWER CONTROL - EXCESSIVE - PILOT IN COMMAND

Factual Information

On September 26, 2000, approximately 0950 Pacific daylight time, an Aeronca 11BC, N3954E, registered to and operated by a private pilot, sustained substantial damage during an on ground collision with safety barricades surrounding the fuel pumps at the Auburn Municipal airport, Auburn, Washington. Visual meteorological conditions existed and no flight plan had been filed. The flight, which was personal, was operated under 14CFR91, and was destined for Crest Airpark, Washington.

The pilot reported (see NTSB Form 6120.1/2 attached) that after arriving at Auburn Municipal airport from a local flight, she taxied to the Chevron fueling area, shut the aircraft down and refueled. Following the refueling, she pushed the aircraft backwards towards a Chevron sign near the fuel pumps and proceeded to secure the airplane in preparation for hand-propping the engine for start. She tied a length of rope around the base of the signpost and then secured the opposite end to the aircraft's tail tie-down hook.

Having secured the aircraft, she then "pulled the throttle off and turned the key on" and made three unsuccessful attempts to start the aircraft's engine by hand propping. She then returned to the cockpit, "cracked" the throttle slightly, and returned to the front of the aircraft. Once hand propped, the engine started immediately. The pilot further reported, "I began walking back to the cockpit but saw that the airplane was idling too fast and moving forward. It continued to go forward, breaking the tail hook rope." The aircraft then veered left impacting the metal barricades protecting the fuel pumps. Both wing struts were bent and the main landing gear were torn off the aircraft.

A follow-up interview was telephonically conducted with the pilot. She reported that the aircraft was equipped with wheel brakes but no parking brake and that the aircraft, having no electric starter system, required hand-propping to start the engine. She also stated that she carried chocks with her in the aircraft, but they were not used during the accident scenario. The tail tie-down hook on the aircraft had a release mechanism actuated from the cockpit which would allow the pilot, once aboard, to release the rope at the tie-down hook end.

Pilot Information

Certificate:	Private	Age:	46,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 12, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	246 hours (Total, all aircraft), 55 hours (Total, this make and model), 150 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aeronca	Registration:	N3954E
Model/Series:	11BC 11BC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	11BC-38
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 2, 2000 Annual	Certified Max Gross Wt.:	1250 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	A75
Registered Owner:	RITTENHOUSE, LYNN C.	Rated Power:	75 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RNT ,29 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	09:53 Local	Direction from Accident Site:	335°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(S50)	Type of Flight Plan Filed:	None
Destination:	CREST AIRPARK , WA (S36)	Type of Clearance:	
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	AUBURN MUNICIPAL S50	Runway Surface Type:	
Airport Elevation:	57 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	47.309612,-122.219421(est)

Administrative Information

Investigator In Charge (IIC):	Mccreary, Steven
Additional Participating Persons:	DENNIS FRANKS; RENTON , WA
Original Publish Date:	May 18, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50357

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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](#).