



# **Aviation Investigation Final Report**

Location:	Fredericksburg, Pennsylvania	Accident Number:	NYC05CA104
Date & Time:	June 20, 2005, 15:00 Local	<b>Registration:</b>	N33818
Aircraft:	Piper J3C-65	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

## Analysis

After landing, the pilot waited about 15 minutes, and then "wanted to see if the Cub would start when hot." He planned on hand propping the airplane, and then performing a short local flight. The pilot stated that "instead of getting help propping the Cub," he put a chock under the wheel, attempted to start the airplane, and proceeded to flood the engine. He then increased the throttle setting, turned the mags off, exited the airplane, and turned the propeller by hand, several times, to clear the engine. He then leaned inside the airplane to turn the mags back on; however, he did not retard the throttle. The airplane "jumped the chock," crossed a field, and impacted a light pole. Federal Aviation Administration publication, Preventing Accidents During Aircraft Ground Operations (FAA-P-8740-20), provided suggestions to aid in increasing the safety factor while hand starting airplanes. The publication stated, in part, "No one should attempt to start an aircraft engine without a qualified person at the cockpit controls. The person turning the propeller should be properly trained in the technique of hand cranking. If you have in mind to try hand propping by yourself - DON'T. If you must hand prop - get qualified help to position the engine controls and switches during the starting procedure. If hand propping can be avoided - DO."

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper engine starting procedures, which resulted in the airplane taxiing unoccupied and impacting a light pole.

#### Findings

Occurrence #1: MISCELLANEOUS/OTHER Phase of Operation: STANDING - STARTING ENGINE(S)

Findings
1. (C) STARTING PROCEDURE - IMPROPER - PILOT IN COMMAND
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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: TAXI

Findings 2. OBJECT - POLE

#### **Factual Information**

On June 20, 2005, at 1500 eastern daylight time, a Piper J3C-65, N33818, was substantially damaged after impacting a light pole, while taxiing unoccupied, at the Farmers Pride Airport (9N7), Fredericksburg, Pennsylvania. The certificated airline transport pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the planned personal flight conducted under 14 CFR Part 91.

According to the pilot, after he landed at 9N7, he waited about 15 minutes, and then "wanted to see if the Cub would start when hot." He planned to hand prop the airplane and then perform a short local flight. The pilot stated that "instead of getting help propping the Cub," he put a chock under the wheel, attempted to start the airplane, and proceeded to flood the engine. He then increased the throttle setting, turned the mags off, exited the airplane, and turned the propeller, by hand, several times, to clear the engine. He leaned inside the airplane to turn the mags back on; however, he did not retard the throttle. The airplane "jumped the chock," crossed a field, and impacted a light pole.

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### Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 1, 2005
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	April 1, 2004
Flight Time:	24000 hours (Total, all aircraft), 100 hours (Total, this make and model), 21000 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N33818
Model/Series:	J3C-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5988
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	October 1, 2004 Annual	Certified Max Gross Wt.:	1170 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2500 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	A&C 65
Registered Owner:	Ronald Snyder	Rated Power:	65 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:	MUI,489 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	16:56 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Few / 4000 ft AGL	Visibility	20 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	25°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fredericksburg, PA (9N7 )	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	

### **Airport Information**

Airport:	Farmers Pride Airport 9N7	Runway Surface Type:	
Airport Elevation:	495 ft msl	<b>Runway Surface Condition:</b>	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

### 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:	40.442779,-76.44139

#### **Administrative Information**

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	David Sakmar; HAR FSDO
Original Publish Date:	October 27, 2005
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61783

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.