



Aviation Investigation Final Report

Location:	Scappoose, Oregon	Accident Number:	SEA02LA040
Date & Time:	February 12, 2002, 15:00 Local	Registration:	N7004P
Aircraft:	Piper PA-24-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he hand propped the engine because the electric starter would not start the engine. He instructed his passenger, seated in the right seat, in the use of the "T" handle brake system, which had to be pushed in for the Johnson brake bar to work. The pilot then set the throttle between one-quarter and three-eighths of an inch. Once the engine started, the pilot observed that the engine produced high power and the aircraft began to move forward. The aircraft knocked down the pilot as it accelerated across the airport. The aircraft crossed the runway and a taxiway and collided with a fence and trees in a park to the west side of the airport. The pilot reported that he did not understand how the brake could have been released. No tie-downs or wheel chocks were used.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to tie down the aircraft prior to hand propping the engine. Factors were a fence, trees, and the pilot's inadequate preflight planning/preparation.

Findings

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

Findings

1. (C) TIE DOWN - NOT USED - PILOT IN COMMAND

2. (F) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (F) OBJECT - FENCE
4. (F) OBJECT - TREE(S)

Factual Information

On February 12, 2002, about 1500 Pacific standard time, a Piper PA-24-180, N7004P, registered to and operated by the pilot as a 14 CFR Part 91 personal flight, sustained substantial damage when it collided with a fence and trees at the Scappoose Industrial Airpark, Scappoose, Oregon. Visual meteorological conditions prevailed at the time and no flight plan was filed. The private pilot received minor injuries and the passenger was fatally injured.

During a telephone interview and subsequent written statement, the pilot reported that after fueling, attempts to start the engine with the electric starter were unsuccessful, therefore, he decided to hand prop the engine. The pilot stated that he "pulled the prop through six to seven times" to purge the fuel in the cylinders. After this was completed, he instructed his passenger, seated in the right seat, to turn on the master switch. The pilot then turned the magnetos to the both on position, enriched the mixture, and opened the throttle one-quarter to three-eighths of an inch. The pilot also instructed his passenger on the operation of the "T" handle brake system, which had to be pushed in for the Johnson brake bar to work. The pilot stated that he then "pushed on the cowl to verify the brake was set. It was. I pulled the prop, and the engine instantly started". The pilot then started to walk around the wing when the engine RPM increased to high RPM and the airplane began to move forward. The wing knocked the pilot down and the airplane continued to travel across the ramp toward the runway. The aircraft crossed the runway and a taxiway before colliding with a fence and subsequently trees in a park on the west side of the airport.

The aircraft fuselage came to rest against a tree. Both wings and the left horizontal stabilizer separated from the fuselage.

The pilot stated that he does not know how the brake could have been released, and he reported no mechanical malfunction or failure on the NTSB Pilot/Operator Aircraft Accident Report Form 6120.1/2. No ground tie down ropes or wheel chocks were used.

An automated weather observation at Scappoose reported at 1453, clear skies with 10 miles visibility and wind from 330 degrees at 3 knots.

Witnesses at the fuel pumps, reported to a Scappoose Police Department Officer, that the aircraft was traveling approximately 70 to 80 miles per hour when it collided with the fence and trees.

Pilot Information

Certificate:	Private	Age:	54, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
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-w/ waivers/lim	Last FAA Medical Exam:	May 15, 2001
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 28, 2002
Flight Time:	733 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7004P
Model/Series:	PA-24-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2155
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	November 1, 2001 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	4.6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3045.2 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SPB,58 ft msl	Distance from Accident Site:	
Observation Time:	14:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	11°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Scappoose, OR (SPB)	Type of Flight Plan Filed:	None
Destination:	Scappoose, OR (SPB)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Scappoose SPB	Runway Surface Type:	
Airport Elevation:	58 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Minor	Latitude, Longitude:	45.772499,-121.86222

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	Tom McGar; FAA- Portland FSDO; Portland, OR
Original Publish Date:	May 21, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=54192

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](#).