



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Venice, Florida	Accident Number:	ERA21LA359
Date & Time:	September 9, 2021, 09:30 Local	Registration:	N782JA
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:	Powerplant sys/comp malf/fail	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during the descent for landing, the engine did not respond when he attempted to level off and increase power. Further attempts to adjust the throttle were unsuccessful and engine rpm remained at 1,900. As the airplane was over the runway, the pilot was unable to slow it down, so he forced the nose down onto the grass that was beyond the runway end. After the airplane touched down, it bounced twice, collided with a fence, and nosed over. The airplane was substantially damaged and the pilot and passenger were unhurt. The Federal Aviation Administration inspector who responded to the scene confirmed the substantial damage and found that the connecting hardware for the linkage between the fuel injector servo and the throttle cable were missing. The missing bolt, washer, and nut were subsequently found loose, inside the engine cowling; however, the nut was inconsistent with the nut required by the aircraft illustrated parts manual. The engine had been overhauled and reinstalled about 50 operating hours before the accident.

Probable Cause and Findings

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

Maintenance personnel's failure to use the correct throttle linkage hardware when reinstalling the engine, resulting in a disconnection of the throttle during flight.

Findings

Aircraft	Fuel controlling system - Incorrect service/maintenance
Personnel issues	Replacement - Maintenance personnel

Factual Information

History of Flight

Approach-IFR final approach	Powerplant sys/comp malf/fail (Defining event)
Landing	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	22, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	December 8, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 6, 2021
Flight Time:	149 hours (Total, all aircraft), 86 hours (Total, this make and model), 86 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N782JA
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S10560
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 16, 2021 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	11298 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	FLORIDA FLIGHT TRAINING CENTER	Rated Power:	180
Operator:	FLORIDA FLIGHT TRAINING CENTER	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KVNC, 19 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 2200 ft AGL	Visibility	8 miles
Lowest Ceiling:	Broken / 3900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	30°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Venice, FL	Type of Flight Plan Filed:	IFR
Destination:	Venice, FL	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	VENICE MUNI VNC	Runway Surface Type:	Asphalt
Airport Elevation:	18 ft msl	Runway Surface Condition:	Dry
Runway Used:	05/23	IFR Approach:	RNAV
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	27.07,-82.44(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Camanche Cain; FAA FSDO; Tampa, FL
Original Publish Date:	May 4, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=103865

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](#).