



Aviation Investigation Final Report

Location:	Marshall, Minnesota	Accident Number:	CHI04CA252
Date & Time:	September 4, 2004, 11:00 Local	Registration:	N5005J
Aircraft:	Cessna T310R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane sustained substantial damage during a forced landing following a loss of engine power during cruise flight. The pilot stated in a telephone interview that during the flight, a pilot-rated passenger was handling radio communications and also handling some flying duties. He stated that he believes that the pilot-rated passenger inadvertently switched the fuel selectors so that both engines were using fuel from the right main fuel tank. He said that he believes that this occurred when the pilot-rated passenger was attempting to switch the fuel tanks from the auxiliary fuel tanks back to the main fuel tanks. He stated that later in the flight both engines stopped producing power. The pilot stated that he switched fuel tanks and was able to re-start the left engine, but could not get the right engine to restart. He said that he was unable to maintain altitude and elected to land on a gravel road. The pilot said that the road was narrow and the left landing gear went off of the road. The airplane subsequently went off of the left side of the road and into a bean field. The pilot stated that during the attempts to restart the right engine, the propeller was not placed in the feather position. He stated that he was the pilot in command of the flight and that he was seated in the left seat of the airplane. The pilot did not report any malfunction of the airplane or it's systems.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot rated passenger selecting an improper fuel selector position, and the pilot in command not verifying the fuel selector position which resulted in fuel starvation. Contributing factors were the pilot's failure to feather the right engine propeller during the emergency, the unsuitable terrain encountered during the landing, and the crop.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: CRUISE

Findings

(C) FLUID,FUEL - STARVATION
(C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT PASSENGER
(C) FUEL TANK SELECTOR POSITION - NOT VERIFIED - PILOT IN COMMAND
(F) PROPELLER FEATHERING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

5. (F) TERRAIN CONDITION - CROP

6. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On September 4, 2004, about 1100 central daylight time, a Cessna T310R, N5005J, piloted by a commercial pilot, sustained substantial damage during a forced landing following a loss of engine power during cruise flight. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions on an instrument rules flight plan. There were no injuries to the 5 occupants. The flight departed from the Fitch H. Beach Airport, Charlotte, Michigan, at an unconfirmed time.

The pilot stated in a telephone interview that during the flight, a pilot rated passenger was handling radio communications and also handling some flying duties. He stated that he believes that pilot rated passenger inadvertently switched the fuel selectors so that both engines were using fuel from the right main fuel tank. He said that he believes that this occurred when the pilot rated passenger was attempting to switch the fuel tanks from the auxiliary fuel tanks back to the main fuel tanks. He stated that later in the flight both engines stopped producing power. The pilot stated that he switched fuel tanks and was able to re-start the left engine, but could not get the right engine to restart. He said that the road was narrow and the left landing gear went off of the road. The pilot stated that during the attempts to restart the right engine, the propeller was not placed in the feather position. He stated that he was the pilot in command of the flight and that he was seated in the left seat of the airplane. The pilot did not report any malfunction of the airplane or it's systems.

Pilot Information

Certificate:	Commercial	Age:	72,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 18, 2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 5000) hours (Total, this make and model)	

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5005J
Model/Series:	T310R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310R0129
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	TSI0-520
Registered Owner:	Dowding Tool Products, Inc.	Rated Power:	
Operator:	Maurice H. Dowding	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	CHARLOTTE, MI (FPK)	Type of Flight Plan Filed:	IFR
Destination:	WATERTOWN, SD (ATY)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	5 None	Latitude, Longitude:	44.650001,-95.380279

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	
Original Publish Date:	December 3, 2004
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=60292

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.