

Aviation Investigation Final Report

Location:	KNOXVILLE, Tennessee	Accident Number:	ATL91LA004
Date & Time:	October 17, 1990, 13:08 Local	Registration:	N19SR
Aircraft:	E TN PLTS STARDUSTER STARDUSTER II	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT REPORTED A LOSS OF ENGINE POWER AT ABOUT 300 FEET AGL DURING THE TAKEOFF LEG. THE AIRPLANE WAS FORCE LANDED IN A LAKE ABOUT 500 FEET FROM THE DEPARTURE END OF THE RUNWAY. AN ENGINE EXAMINATION FAILED TO REVEAL THE SOURCE OF THE POWER LOSS. THE PILOT REPORTED THAT SOMEONE MAY HAVE PLACED THE FUEL LEVER INTO THE 'OFF' POSITION PRIOR TO FLIGHT. HE ALSO STATED THAT HE MAY HAVE INADVERTENTLY KICKED THE FUEL SWITCH TO THE 'OFF' POSITION. HE REPORTED THAT HE DOES NOT USE A CHECKLIST, AND HE SETS THE COCKPIT SWITCHES UP FOR THE NEXT FLIGHT AFTER ENGINE SHUTDOWN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT'S INADVERTENT CLOSING OF THE FUEL SHUTOFF VALVE, WHICH TOTALLY OR PARTIALLY RESTRICTED FUEL FLOW TO THE ENGINE.

Findings

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

Findings 1. (C) FLUID, FUEL - STARVATION 2. (C) FUEL SUPPLY - INADVERTENT DEACTIVATION - PILOT IN COMMAND

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - EMERGENCY

Factual Information

Pilot Information

Certificate:	Private	Age:	61,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	July 27, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2500 hours (Total, all aircraft), 156 hours (Total, this make and model), 2500 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	E TN PLTS STARDUSTER	Registration:	N19SR
Model/Series:	STARDUSTER II STARDUSTER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	389
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	March 28, 1990 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	108 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1D
Registered Owner:	EAST TENNESSEE PILOT'S CLUB	Rated Power:	200 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:	TYS ,981 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	12:52 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Unknown	Visibility	6 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	25°C / 14°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:08 Local	Type of Airspace:	

Airport Information

Airport:	SKY RANCH TN98	Runway Surface Type:	Grass/turf
Airport Elevation:	822 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	2000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	35.909294,-83.869842(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Preston
Additional Participating Persons:	RICHARD M O'LEARY; NASHVILLE , TN GARY SMOTHERMAN; NASHVILLE , TN
Original Publish Date:	November 9, 1992
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8350

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.