



Aviation Investigation Final Report

Location:	MANKATO, Minnesota	Accident Number:	CHI91LA161
Date & Time:	May 21, 1991, 14:30 Local	Registration:	N2906Z
Aircraft:	PIPER PA-22-160	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT SAID THAT SHORTLY AFTER TAKEOFF A PARTIAL LOSS OF ENGINE POWER WAS EXPERIENCED. AN EMERGENCY LANDING WAS ATTEMPTED IN A FARM FIELD WHICH RESULTED IN A NOSE OVER. POST ACCIDENT INVESTIGATION REVEALED A FAULTY ENGINE PRIMER LOCK. WHEN THE ENGINE WAS RUN UP AND THE PRIMER BECAME UNLOCKED, THE ENGINE RPM WOULD DROP, WHICH CONINCIDED WITH THE PILOT'S STATEMENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PARTIAL LOSS OF ENGINE POWER DUE TO AN UNLOCKED ENGINE PRIMER. FACTORS RELATED TO THE ACCIDENT WERE THAT THE PRE TAKEOFF CHECK LIST WAS NOT FOLLOWED BY THE PILOT AND THE LACK OF SUITABLE TERRAIN FOR THE FORCED LANDING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM,PRIMER SYSTEM - UNLOCKED
2. (F) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND

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

Occurrence #3: NOSE OVER
Phase of Operation: LANDING

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

Pilot Information

Certificate:	Private	Age:	18, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
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--no waivers/lim.	Last FAA Medical Exam:	August 1, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	105 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2906Z
Model/Series:	PA-22-160 PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	22-6877
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-B2A
Registered Owner:		Rated Power:	160 Horsepower
Operator:	STEVE/CHRIS NAPIER	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:	MKT ,1020 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:55 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 1500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MANKATO , MN (MKT)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:25 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Hruban, John

Additional Participating Persons: LEWIS GONZALES;

Original Publish Date: March 24, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=15068>

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](#).