



# **Aviation Investigation Final Report**

Location: FT. LEVENWORTH, Kansas Accident Number: CHI92DCG03

Date & Time: July 7, 1992, 19:30 Local Registration: N583BD

Aircraft: DANIEL M. DENT BD-5 B Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

THE ACCIDENT AIRPLANE COLLIDED WITH TERRAIN AFTER LOSING ENGINE POWER DURING FINAL APPROACH TO THE LANDING RUNWAY. THE PILOT STATED THAT HE ENTERED THE TRAFFIC PATTERN, STARTED HIS LANDING DESCENT AND EVERYTHING WAS NORMAL. ABOUT 500 FEET AGL THE ENGINE TACHOMETER LOST ABOUT 200 RPM, THEN THE ENGINE QUIT. THE AIRPLANE STRUCK THE TOP OF A LEVY NEAR THE APPROACH END OF THE RUNWAY. DURING THE ON SCENE INVESTIGATION THE WIRING FROM THE IGNITION SOURCE TO THE IGNITION KILL SWITCH WAS CHECKED AND FOUND TO BE SHORTED TO THE DECK IN THE ENGINE COMPARTMENT, DEACTIVATING THE SINGLE IGNITION SYSTEM USED ON THIS AIRCRAFT.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A COMPLETE LOSS OF ENGINE POWER FOLLOWING AN ELECTRICAL SHORT TO GROUND IN THE AIRCRAFT'S 'IGNITION KILL' ELECTRIC CIRCUIT.

#### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) IGNITION SYSTEM - SHORTED

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. TERRAIN CONDITION - BERM

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## **Factual Information**

#### **Pilot Information**

Certificate:	Commercial	Age:	31,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-no waivers/lim.	Last FAA Medical Exam:	January 17, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1510 hours (Total, all aircraft), 11 hours (Total, this make and model), 905 hours (Pilot In Command, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	DANIEL M. DENT	Registration:	N583BD
Model/Series:	BD-5 B BD-5 B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	001
Landing Gear Type:	Retractable - Tricycle	Seats:	1
Date/Type of Last Inspection:	June 3, 1992 Annual	Certified Max Gross Wt.:	850 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	12 Hrs	Engine Manufacturer:	ROTAX
ELT:	Not installed	Engine Model/Series:	583
Registered Owner:	DANIEL M. DENT	Rated Power:	88 Horsepower
Operator:	DANIEL M. DENT	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	COU ,772 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:45 Local	Direction from Accident Site:	15°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(FLV)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	SHERMAN AAF FLV	Runway Surface Type:	
Airport Elevation:	772 ft msl	<b>Runway Surface Condition:</b>	
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	5905 ft / 100 ft	VFR Approach/Landing:	Forced landing;Traffic pattern

### **Wreckage and Impact Information**

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	39.359706,-94.909339(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Coddington, Richard
Additional Participating Persons:	
Original Publish Date:	July 26, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15217

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.

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