



Aviation Investigation Final Report

Location:	DOWS, Iowa	Accident Number:	CHI92DCD09
Date & Time:	August 20, 1992, 19:30 Local	Registration:	N527HA
Aircraft:	HILLER 12E	HILLER UH-	Aircraft Damage: Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PILOT OF THE ACCIDENT HELICOPTER REPORTED AN ENGINE FAILURE OCCURRED WHILE HE WAS PERFORMING AERIAL APPLICATION OF AGRICULTURAL CHEMICALS. THE HELICOPTER COLLIDED WITH A DITCH DURING THE FORCED LANDING. POST ACCIDENT INSPECTION REVEALED CONTAMINATED FUEL IN THE HELICOPTER FUEL SYSTEM AND IN THE FUEL TANK USED TO SERVICE THE AIRCRAFT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: CONTAMINATED FUEL RESULTING IN A LOSS OF ENGINE POWER.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings
1. (C) FLUID,FUEL - CONTAMINATION

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. TERRAIN CONDITION - DITCH

Factual Information

Pilot Information

Certificate:	Commercial	Age:	22, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 23, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1050 hours (Total, all aircraft), 600 hours (Total, this make and model), 950 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N527HA
Model/Series:	HILLER UH-12E HILLER UH-	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	January 2, 2000 100 hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-540
Registered Owner:	BONANZA VALLEY AVIATION	Rated Power:	305 Horsepower
Operator:	BONANZA VALLEY AVIATION	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	PVMG

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:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	20°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.649826,-93.500961(est)

Administrative Information

Investigator In Charge (IIC):	Cullwell, Marge
Additional Participating Persons:	ROBERT J HILLOCK; DES MOINES , IA
Original Publish Date:	September 14, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=15213

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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](#).