



Aviation Investigation Final Report

Location:	Delaplaine, Arkansas	Accident Number:	CEN17LA230
Date & Time:	June 14, 2017, 18:20 Local	Registration:	N7501Z
Aircraft:	Grumman G164	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The commercial pilot was conducting an aerial application flight. He was approaching a rice field after loading product at the company base when the engine lost partial power. The pilot executed a forced landing into the rice field; the right main landing gear struck a levee, and the airplane flipped inverted, which resulted in substantial damage to the wings and fuselage. Examination of the wreckage did not reveal any mechanical malfunctions or failures with the airplane or engine and did not show any evidence of fuel. Although the top fuel tank was breached in the accident, the green grass around and underneath the wreckage did not show any evidence of fuel contamination or blight. It is likely that the engine lost power due to fuel exhaustion.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The loss of engine power due to fuel exhaustion, which resulted in a forced landing on unsuitable terrain.

Findings

Aircraft	Fuel - Fluid level
Environmental issues	Sloped/uneven terrain - Contributed to outcome

Factual Information

History of Flight

Maneuvering-low-alt flying	Loss of engine power (partial) (Defining event)
Emergency descent	Off-field or emergency landing
Emergency descent	Collision with terr/obj (non-CFIT)

On June 14, 2017, about 1820 central daylight time, a Grumman G164 agricultural airplane, N7501Z, was substantially damaged following a forced landing after a partial loss of engine power near Delaplaine, Arkansas. The commercial pilot sustained minor injuries. The airplane was registered to HDS Inc., of Beech Grove, Arkansas, and operated by Kin-Co Ag Aviation Inc., of Beech Grove, Arkansas, as a local agricultural flight under the provisions of Title 14 *Code of Federal Regulations* Part 137. Visual meteorological conditions prevailed and a company flight plan was filed. The flight originated at 1800 from the operator's private airstrip located in Delaplaine, Arkansas.

The pilot reported that he was en route to spray a rice field after loading chemicals at the company base. While approaching the field, the engine was not producing full power. The pilot elected to executed a forced landing into a rice field. As the airplane landed in the field, the right main landing gear struck a levee, and the airplane flipped inverted, resulting in substantial damage to the wings and fuselage. There were no witnesses to the accident.

Examination of the wreckage by a Federal Aviation Administration inspector did not reveal any mechanical anomalies with the airplane or engine and did not show any evidence of fuel. Although the top fuel tank was breached in the accident, fresh green grass around and underneath the wreckage did not show any evidence of fuel contamination, or blight.

Pilot Information

Certificate:	Commercial	Age:	51,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 19, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5000 hours (Total, all aircraft), 1270 hours (Total, this make and model), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman	Registration:	N7501Z
Model/Series:	G164 C	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	42C
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 2, 2017 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Turbo prop
Airframe Total Time:	3109 Hrs as of last inspection	Engine Manufacturer:	Honeywell
ELT:	Not installed	Engine Model/Series:	TPE331
Registered Owner:		Rated Power:	650 Horsepower
Operator:		Operating Certificate(s) Held:	Agricultural aircraft (137)
Operator Does Business As:		Operator Designator Code:	NOSG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ARG,279 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	18:35 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	23°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Delaplaine, AR	Type of Flight Plan Filed:	
Destination:	Delaplaine, AR	Type of Clearance:	None
Departure Time:	18:00 Local	Type of Airspace:	Class E

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:	36.219444,-90.731391(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Bill Aldrich; FAA FSDO; Little Rock, AR
Original Publish Date:	April 13, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=95373

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).