



Aviation Investigation Final Report

Location:	Lyford, Texas	Accident Number:	DFW05CA209
Date & Time:	August 9, 2005, 09:20 Local	Registration:	N7794V
Aircraft:	Rockwell S-2R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The 18,000-hour commercial pilot of an agricultural aerial application airplane departed a private airstrip at approximately 0855, with the airplane filled with 200 gallons of fuel, en-route to his job site. The pilot started his spraying runs and during a "steep climbing left turn," the engine lost power. The pilot lowered the wing flaps and turned the airplane into the wind; however, and after determining there were "obstacles" in his landing path, he continued the turn towards the west which resulted in landing with a quartering tailwind. The airplane stalled just above the ground, impacting the right gear and wing tip. The airplane came to rest in the upright position in a plowed field. The reason for the reported loss of engine power could not be determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons. A contributing factor was the lack of suitable terrain for the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

2. (F) TERRAIN CONDITION - PLOWED/FURROWED

Occurrence #4: MAIN GEAR COLLAPSED

Phase of Operation: EMERGENCY LANDING

Factual Information

On August 9, 2005, approximately 0920 central daylight time, a single-engine Rockwell S-2R agricultural airplane, N7794V, was substantially damaged during a forced landing following a loss of engine power while maneuvering near Lyford, Texas. The commercial pilot, sole occupant of the airplane, was not injured. The airplane was registered to and operated by Bennack Flying Service, Inc., of Lyford, Texas, under the provisions of 14 Code of Federal Regulations Part 137 as an aerial application flight. Visual meteorological conditions prevailed and a flight plan was not filed for the local flight.

According to a written statement submitted by the 18,000-hour pilot, he departed a private airstrip at approximately 0855, with the airplane filled with 200 gallons of fuel, en-route to his job site. The pilot stated, that he started his spraying runs and during a steep climbing left turn, experienced an engine failure. The pilot lowered the flaps and turned into the wind; however, after determining there were "obstacles" in his landing path, he continued the turn towards the west, which resulted in landing with a quartering tailwind. The pilot further stated that the airplane stalled just above the ground, impacting the right gear and wing tip.

An examination of the airplane by a Federal Aviation Administration (FAA) inspector, who traveled to the scene of the accident, revealed structural damage to the right wing. Additional photos of the airplane, showed the right main landing gear collapsed upward, toward the right wing. The airplane came to rest upright in a plowed field. The reason for the reported loss of engine power could not be determined.

At 0852, the automated weather observing system at Valley International Airport (HRL), approximately 18 miles south of the accident site, reported wind from 160 degrees at 18 knots, 10 statute miles visibility, few clouds at 2,300 feet, 88 Fahrenheit, dew point 73 degrees Fahrenheit, and an altimeter setting of 29.98 inches of Mercury.

Pilot Information

Certificate:	Commercial	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 1, 2005
Occupational Pilot:		Last Flight Review or Equivalent:	February 1, 2004
Flight Time:	18000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 150 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N7794V
Model/Series:	S-2R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	2321R
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	June 1, 2005 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	106 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	5307 Hrs	Engine Manufacturer:	Garrett
ELT:	Not installed	Engine Model/Series:	TPE-331
Registered Owner:	Bennack Flying Service, Inc.	Rated Power:	
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	Bennack Flying Service, Inc.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HRL	Distance from Accident Site:	18 Nautical Miles
Observation Time:	08:52 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 2300 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	31°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lyford, TX	Type of Flight Plan Filed:	None
Destination:	Lyford, TX	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	

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:	26.466667,-97.833335

Administrative Information

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Gary E Stamper; San Antonio FSDO
Original Publish Date:	October 27, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=62197

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](#).