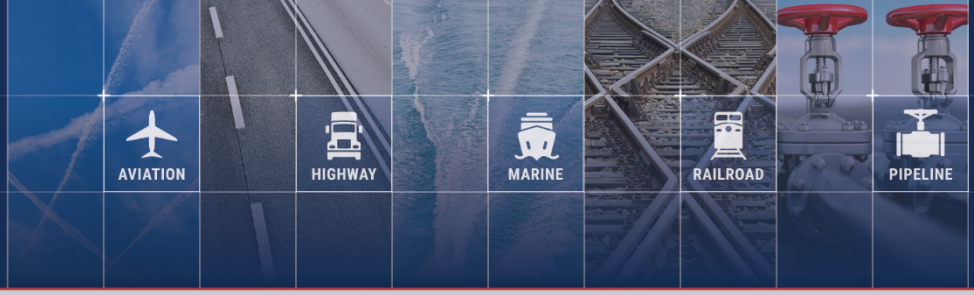

Aviation Investigation Final Report

Location:	Colusa, California	**Accident Number:**	WPR18LA189
Date & Time:	July 9, 2018, 11:00 Local	**Registration:**	N6696K
Aircraft:	Grumman G164B	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was performing an aerial application flight when the engine made a popping noise and began to vibrate. The airplane slowed and the pilot initiated a turn toward a nearby runway. The engine subsequently lost total power and the airplane impacted terrain, where it nosed over and came to rest inverted, resulting in substantial damage. The operator reported that the engine was sent to a repair and overhaul facility following the accident and that no anomalies were found that would have precluded normal operation.

Probable Cause and Findings

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

Total loss of engine power for reasons that could not be determined based on the available information.

Findings

Aircraft	(general) - Unknown/Not determined
Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Maneuvering-low-alt flying	Loss of engine power (total) (Defining event)
Landing	Nose over/nose down

On July 9, 2018, about 1100 Pacific daylight time, a Grumman G-164B airplane, N6696K, was substantially damaged when it was involved in an accident near Colusa, California. The commercial pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

The pilot reported that he was approaching a field to begin the application when the engine made a popping noise and started to vibrate. The airplane slowed and the pilot initiated a turn toward a nearby runway. Since the airplane was still losing speed, the pilot added power, but the vibration increased until the engine lost total power. The airplane impacted terrain and came to rest upside down, resulting in substantial damage to the wings and empennage.

The operator reported that the engine was sent to a repair and overhaul facility following the accident. No anomalies were found with the engine that would have precluded normal operation.

Pilot Information

Certificate:	Commercial	**Age:**	41,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Single
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	February 26, 2018
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	February 26, 2018
Flight Time:	4380 hours (Total, all aircraft), 2100 hours (Total, this make and model), 4207 hours (Pilot In Command, all aircraft), 275 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman	**Registration:**	N6696K
Model/Series:	G164B	**Aircraft Category:**	Airplane
Year of Manufacture:	1978	**Amateur Built:**	
Airworthiness Certificate:	Restricted (Special)	**Serial Number:**	426B
Landing Gear Type:	Tailwheel	**Seats:**	1
Date/Type of Last Inspection:	December 14, 2017 Annual	**Certified Max Gross Wt.:**	4500 lbs
Time Since Last Inspection:	50 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	9081 Hrs at time of accident	**Engine Manufacturer:**	Pratt and Whitney
ELT:	Not installed	**Engine Model/Series:**	R1340 SERIES
Registered Owner:		**Rated Power:**	600 Horsepower
Operator:		**Operating Certificate(s) Held:**	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	MYV,64 ft msl	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	10:53 Local	**Direction from Accident Site:**	90°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.03 inches Hg	**Temperature/Dew Point:**	28°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colusa, CA (O08)	**Type of Flight Plan Filed:**	None
Destination:	Colusa, CA	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	39.214443,-122.009445(est)

Administrative Information

Investigator In Charge (IIC):	Link, Samantha		
Additional Participating Persons:	Richard Dilbeck; Federal Aviation Administration; Sacramento, CA Jeffrey Snider; Federal Aviation Administration; Sacramento, CA		
Original Publish Date:	June 24, 2021	**Investigation Class:**	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97719		