



National Transportation Safety Board Aviation Accident Final Report

Location:	PIXLEY, CA	Accident Number:	LAX95LA091
Date & Time:	02/01/1995, 1545 PST	Registration:	N705Y
Aircraft:	GRUMMAN G-164B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

AFTER COMPLETING AN AERIAL APPLICATION SPRAY RUN, THE PILOT EXECUTED A CLIMBING 90/270-DEGREE TURN. DURING THE TURN, THE ENGINE SUSTAINED A LOSS OF POWER. THE PILOT EXECUTED AN EMERGENCY LANDING IN A WET, FRESHLY-PLOWED OPEN FIELD AND SUBSEQUENTLY NOSED OVER. THE POSTACCIDENT ENGINE EXAMINATION REVEALED THE NUMBER THREE CYLINDER WAS SPLIT BETWEEN THE SPARK PLUGS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the total failure of the number three cylinder. The wet and soft terrain were factors in this accident.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: MANEUVERING

Findings

1. (C) ENGINE ASSEMBLY,CYLINDER - FAILURE,TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Occurrence #3: NOSE OVER

Phase of Operation: LANDING

Findings

2. (F) TERRAIN CONDITION - WET

3. (F) TERRAIN CONDITION - SOFT

Factual Information

On February 1, 1995, at 1545 hours Pacific standard time, a Grumman G-164B, N705Y, flipped over in an open muddy field after executing an emergency landing near Pixley, California. The emergency landing was preceded by a loss of engine power. The pilot was conducting a Title 14 CFR 137 visual flight rules local aerial application flight. The airplane, operated by Pixley Dusters, Inc., of Earlimart, California, sustained substantial damage. The certificated commercial pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed. The flight originated from the operator's private airstrip at Earlimart at 1530 hours.

The operator told a Federal Aviation Administration (FAA) airworthiness inspector that when the pilot was executing a 90/270-degree climbing turn, the engine's number three cylinder cracked. The pilot landed the airplane in the soft field, but flipped over shortly after touchdown.

An FAA inspector reported that he found the cylinder split between each of the spark plugs. It was also split at the top of the plug to the exhaust valve.

Pilot Information

Certificate:	Commercial	Age:	55, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/08/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	11812 hours (Total, all aircraft), 6000 hours (Total, this make and model), 11750 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N705Y
Model/Series:	G-164B G-164B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	315
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	12/15/1994, Annual	Certified Max Gross Wt.:	3750 lbs
Time Since Last Inspection:	36 Hours	Engines:	1 Reciprocating
Airframe Total Time:	13657 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340-AN1
Registered Owner:	PIXLEY DUSTERS INC.	Rated Power:	600 hp
Operator:	PIXLEY DUSTERS INC.	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 2000 ft agl	Visibility	4 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	2 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	345°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13° C
Precipitation and Obscuration:			
Departure Point:	EARLIMART, CA	Type of Flight Plan Filed:	None
Destination:	, CA	Type of Clearance:	None
Departure Time:	1530 PST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): A. D LLORENTE, **Report Date:** 05/09/1995

Additional Participating Persons: TONY THOMAS; FRESNO, CA

Publish Date:

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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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](#).