

Aviation Investigation Final Report

Location:	MELVIN, Alabama		Accident Number:	ATL87DKG04
Date & Time:	June 10, 1987, 07	:40 Local	Registration:	N205PS
Aircraft:	BELL	TH-13T	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultu	ural		

Analysis

THE PLT RPRTD THAT AFTER LNDG TO RELOAD WITH HERBICIDE, HE GOT OUT OF THE HELICOPTER TO CHECK THE FUEL IN THE TANKS. AFTER A VISUAL INSPN, HE BELIEVED HE HAD 'AN ADEQUATE AMOUNT' OF FUEL TO FLY ABOUT 1/4 MI TO THE AREA TO BE SPRAYED, APPLY THE CHEMICAL & RETURN TO THE LOADING AREA. HOWEVER, WHEN HE WAS ON THE LAST SPRAY RUN AT ABOUT 40' AGL, THE ENG LOST POWER. THE PLT MADE AN AUTOROTATIVE APCH TO A NEARBY ROAD WHERE THE HELICOPTER LNDD HARD & SKIDDED TO A STOP. DRG THE LNDG, THE TAIL BOOM HIT THE ROAD & WAS EXTENSIVELY DAMAGED. THE PLT STATED THE HELICOPTER RAN OUT OF FUEL.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

- 1. (C) PLANNING/DECISION IMPROPER PILOT IN COMMAND
- 2. (C) FLUID, FUEL EXHAUSTION
- 3. (C) FUEL SUPPLY MISJUDGED PILOT IN COMMAND

Occurrence #2: FORCED LANDING Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings 4. AUTOROTATION - PERFORMED

Occurrence #3: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	41,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 6, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10395 hours (Total, all aircraft), 600 hours (Total, this make and model), 10300 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N205PS
Model/Series:	TH-13T TH-13T	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	3665
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	March 15, 1987 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5662 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-540
Registered Owner:	PROVINE HELICOPTER SERVICE	Rated Power:	280 Horsepower
Operator:	ROBERT E. PROVINE	Operating Certificate(s) Held:	
Operator Does Business As:	PROVINE HELICOPTER SERVICE	Operator Designator Code:	ZMPG

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	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	31°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	06:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
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:	31.959753,-88.45063(est)

Administrative Information

Investigator In Charge (IIC):	Pickett, Harley	
Additional Participating Persons:	HARLEY PICKETT; BIRMINGHAM , AL	
Original Publish Date:	October 25, 1988	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=7241	

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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 <u>here</u>.