



Aviation Investigation Final Report

Location:	SUBLETTE, Illinois	Accident Number:	CHI82DA171
Date & Time:	May 17, 1982, 09:35 Local	Registration:	N7841S
Aircraft:	BELL 47G-5	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

PRIOR TO THIS FLIGHT, THE HELICOPTER HAD BEEN FLOWN ABOUT 1 HR FROM ROSELLE TO SUBLETTE, IL, THEN IT WAS FLOWN ANOTHER 1/2 HR TO SURVEY THE AREA TO BE SPRAYED. ABOUT 10 MINUTES AFTER DEPARTING TO SPRAY, THE ENGINE LOST POWER. THE PILOT STARTED AN AUTOROTATIVE LANDING TO A ROAD. HOWEVER, DUE TO VEHICULAR TRAFFIC, THE PILOT ATTEMPTED TO LAND BEYOND THE ROADWAY, BUT THE HELICOPTER STRUCK A GUARD RAIL AND CAME TO REST IN A LAKE. ACCORDING TO COMPANY PERSONNEL, FUEL EXHAUSTION HAD OCCURRED. THE HELICOPTER HAD NOT BEEN REFUELED AFTER DEPARTING ROSELLE.

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: CRUISE

Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. (C) FLUID,FUEL - EXHAUSTION
3. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

4. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

5. (F) OBJECT - VEHICLE

6. MANEUVER - ATTEMPTED - PILOT IN COMMAND

7. (F) OBJECT - FENCE

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	59, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
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 Medical--w/ waivers/lim	Last FAA Medical Exam:	August 28, 1981
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	12100 hours (Total, all aircraft), 65 hours (Total, this make and model), 11700 hours (Pilot In Command, all aircraft), 69 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N7841S
Model/Series:	47G-5 47G-5	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	7862
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:	47 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5042 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-B1A
Registered Owner:	CLARKE OUTDOOR SPRAYING	Rated Power:	260 Horsepower
Operator:	CLARKE OUTDOOR SPRAYING	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

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	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	65°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SUBLETTE , IL	Type of Flight Plan Filed:	None
Destination:	SUBLETTE , IL	Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

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:	41.639087,-89.229927(est)

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: May 17, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=72749>

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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 [here](#).