



National Transportation Safety Board Aviation Accident Final Report

Location:	PORTALES, NM	Accident Number:	FTW83LA421
Date & Time:	09/01/1983, 1630 CDT	Registration:	N277SP
Aircraft:	HUGHES 500D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Executive/Corporate		

Analysis

THE PLT LANDED AT PORTALES, NM WITH ABOUT 7 GAL OF JET FUEL REMAINING IN THE FUEL TANK. SINCE JET FUEL WAS NOT AVAILABLE, HE ADDED 15 GAL OF 100 LOW LEAD AVGAS, WHICH WAS AN APPROVED ALTERNATE FUEL. SHORTLY AFTER TAKING OFF, THE ENG FLAMED OUT & THE PLT WAS UNABLE TO OBTAIN A RESTART. DURING AN EMERGENCY LANDING, THE TAIL BOOM & MAIN ROTOR BLADES WERE DAMAGED. THE PLT STATED THAT THE START FUEL PUMP WAS IN THE 'ON' POSITION IN ACCORDANCE WITH THE FLT MANUAL & THAT THE AUTORELIGHT SYS WAS ARMED. THE ENG WAS DISASSEMBLED BUT NO CAUSE FOR THE FLAMEOUT WAS FOUND.

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
Phase of Operation: CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/08/1983
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1738 hours (Total, all aircraft), 351 hours (Total, this make and model), 1576 hours (Pilot In Command, all aircraft), 190 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N277SP
Model/Series:	500D 500D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	290461D
Landing Gear Type:	Skid	Seats:	5
Date/Type of Last Inspection:	08/31/1983, 100 Hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	3 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	3209 Hours	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C20B
Registered Owner:	SOUTHWESTERN PUBLIC SERVICE	Rated Power:	375 hp
Operator:	SOUTHWESTERN PUBLIC SERVICE	Operating Certificate(s) Held:	None

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:	Clear / 0 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	CLOVIS, NM	Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	A. V EDWARDS	Report Date:	
Additional Participating Persons:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).