



Aviation Investigation Final Report

Location:	LAS VEGAS, New Mexico	Accident Number:	FTW98LA281
Date & Time:	June 20, 1998, 12:30 Local	Registration:	N1188J
Aircraft:	Rockwell COMMANDER 112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot received his pilot's license on May 11, 1996 and had accumulated 78 hours of flight experience. He recently purchased this complex airplane and had 7.3 hours of experience in it before the accident flight. He was conducting a cross-country flight and diverted south through New Mexico due to turbulence. The pilot stated that his initial time en route was 1.5 hours, however, investigation revealed that he had airborne for 2.5 hours and that the aircraft normally burns 10-14 gallons per hour. He said he lost engine power near Las Vegas, New Mexico, due to 'fuel exhaustion' and landed in soft vegetated terrain. The pilot reported that 'his fuel gauges indicated that he had fuel, so he continued to fly.' He latter reported that he had put 25 gallons of fuel on the airplane before the flight in which the accident occurred.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper preflight planning/preparation for a cross country flight resulting in fuel exhaustion and subsequent loss of engine power. Factors were, unsuitable terrain, lack of total aviation experience, and lack of total experience in make/model of aircraft.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. FLUID,FUEL - EXHAUSTION
 2. (C) PROCEDURES/DIRECTIVES - MISJUDGED - PILOT IN COMMAND
 3. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

4. (F) TERRAIN CONDITION - CONGESTED/CONFINED AREA
5. TERRAIN CONDITION - NONE SUITABLE

Factual Information

On June 20, 1998, at 1230 mountain daylight time, a Rockwell Commander 112, N1188J, was substantially damaged during a forced landing following a loss of engine power 15 miles southeast of Las Vegas Airport, near Las Vegas, New Mexico. The private pilot, the sole occupant aboard, sustained minor injuries. The airplane was being operated by the pilot under Title 14 CFR Part 91. Visual meteorological conditions prevailed for cross-country personal flight which originated from Cortez, Colorado, approximately 2 hours 30 minutes before the accident. No flight plan was filed.

According to FAA records, the pilot received his pilot's license on May 11, 1996, and he reported that he had accumulated 78 hours of flight experience by the time of the accident. According to the pilot's accident report, he was flying cross-country from Cortez to Denver and diverted south through New Mexico due to turbulence. The pilot stated that his initial time en route was 1.5 hours but, in the narrative section of the pilot's accident report he stated his departure time from Cortez was 1000 mountain daylight time, and the time of the accident was 1230 mountain daylight time, which would have made his flight time 2.5 hours. He said he lost engine power near Las Vegas, New Mexico, due to "fuel exhaustion" and made a forced landing in a field inhabited by "cows, numerous trees, and surrounded by a fence." The left wing was severed from the airplane.

According to a Textron-Lycoming representative, fuel consumption for this make and model engine running at 75% power is 10-14 gallons per hour. When the pilot landed at Cortez on June 16, 1998, he told the lineman to put 25 gallons of fuel in the airplane. The lineman reported to the Investigator-In-Charge that when he removed the fuel tank caps, "he could not see any fuel in the tanks—the fuel tanks looked very empty."

The pilot recently purchased this airplane and had received 1.3 hours of instruction in it. He had logged 6 hours of cross-country time in this make and model prior to the accident flight. The pilot reported that "this was the total of his complex aircraft flight time [aircraft that has a retractable landing gear, flaps, and controllable propeller]." The pilot reported that "his fuel gauges indicated that he had fuel, so he continued to fly."

Pilot Information

Certificate:	Private	Age:	22, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 28, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	78 hours (Total, all aircraft), 7 hours (Total, this make and model), 48 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N1188J
Model/Series:	COMMANDER 112 COMMANDER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	187
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	April 4, 1998 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	138 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	2387 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1D6
Registered Owner:	TODD L. FLANNERY	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
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:	LVS ,6874 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	12:50 Local	Direction from Accident Site:	320°
Lowest Cloud Condition:	Clear	Visibility	35 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	18 knots / 26 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / -6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CORTEZ , CO (CEZ)	Type of Flight Plan Filed:	None
Destination:	DENVER , CO (FTG)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Soft;Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	35.589763,-105.220901(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	J. D HUSS; ALBUQUERQUE , NM
Original Publish Date:	February 15, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=20660

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).